

# New Jersey Department of Environmental Protection

Bureau of Safe Drinking Water

Private Well Testing Act Program

Electronic Data Deliverable

Manual

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NOTE TO READER: The instructions provided in this Electronic Data Deliverable (EDD) Manual presumes that users have a basic working knowledge of computers and Windows 95 or higher, as well as a thorough working knowledge of their own software and the application(s) that will be used to prepare their data for submittal to the Private Well Testing Act Program. The PWTA Program suggests that, for basic computer and/or software training, the users contact their computer/software vendor, software or Internet help lines or their local library or community college

#### 1.0 Summary: The New Jersey Private Well Testing Act & Rules

The following summaries of the Private Well Testing Act and the Private Well Testing Act Rule are meant to provide the reader with a limited understanding of the provisions and requirements of the New Jersey Private Well Testing Act Program. For a complete reading of the Act and related rules, please see the listed resources and website locations at the end of this chapter. The rules were adopted and published in the New Jersey Register on September 16<sup>th</sup>, 2002.

## **Summary of the New Jersey Private Well Testing Act**

The Private Well Testing Act (Act) was signed into law on March 23, 2001. A copy of the PWTA is available online at <a href="http://www.njleg.state.nj.us/2000/Bills/PL01/40.HTM">http://www.njleg.state.nj.us/2000/Bills/PL01/40.HTM</a>. Although some parts of the Act became effective immediately, the testing requirements of this Act were delayed until 540 days after the signing date. Effective September 14, 2002, certain real estate transactions involving properties with private wells and some public wells will require testing of the water supply, and will require the Buyer and Seller (or in some cases Lessor and Lessee) to be notified of the test results. The required parameters for testing are listed in the Act and supplemented by the regulations. Once testing is completed, the certified laboratory must submit the test results to the New Jersey Department of Environmental Protection (NJDEP) within five business days.

The types of sales covered by the Act involve real property where the potable water supply is a private well located on that property; or other real property where the potable water supply is a well that has less than 15 service connections or that does not regularly serve an average of 25 people daily at least 60 days out of the year. The closing of title may not take place on these types of properties until testing of the water supply has taken place, and until both the buyer and seller have received and reviewed a copy of the test results. Buyer and Seller must both certify in writing at closing that they have received and reviewed the test results. The buyer and seller will determine who pays for the well test as well as what actions, if any, will occur if the test indicates a failure for any parameter. This new law functions more as a "notice" type of provision.

The Act also applies to certain lessors and lessees in New Jersey. The Lessor of real property where the water supply is a private well for which testing of the water is not required pursuant to any other State law, must also have the water tested for the required parameters. Lessors are required to complete testing by March 2004 and thereafter at least once every five years. The Lessor is required to provide a copy of new test results to each rental unit within 30 days of receiving those results. Any new Lessee of a rental unit is to be provided by the Lessor with a written copy of the most recent test results. This section of the Act, N.J.S.A. 58:12A-32, serves mainly as a notice to lessees.

The Act specifies that the well samples must be analyzed by a New Jersey certified laboratory for the following parameters: **bacteria** (**total coliform**), **nitrates**, **iron**, **manganese**, **pH**, **lead**, **and all volatile organic compounds** for which maximum contaminant levels (MCLs) have been established according to state law. In addition, the Act states that testing shall include a **short term 48-hour gross alpha test** to screen for the presence of radium, provided that the

NJDEP determines that there are sufficient number of laboratories certified to perform this test. The NJDEP has the authority to limit the areas required to perform radium testing based upon the availability of certified laboratories and cost of analysis.

In accordance with the Private Well Testing Act, the NJDEP has adopted rules which:

- Require testing (N.J.A.C. 7:9E) for those specifically named parameters in the Act <u>AND</u> included additional parameters to test for, such as, fecal coliform or E. coli, mercury and arsenic. (N.J.A.C. 7:9E is available online at <u>www.state.nj.us/dep/pwta</u>) Mercury and arsenic are required to be tested only in specified NJ counties (See Appendix 9);
- Developed a protocol for testing for gross alpha using a new method called the 48-Hour Rapid Gross Alpha Test. Refer to the companion rule proposal, Regulations Governing the Certification of Laboratories and Environmental Measurements (N.J.A.C.7:18) appearing in the New Jersey Register September 16<sup>th</sup>, 2002;
- Developed a timeframe for the length of time the data remains valid before re-testing is required;
- Developed a standardized *Private Well Water Test Reporting Form* for laboratories to use to convey well test results to their clients. This new form is available on the NJDEP's PWTA website: www.state.nj.us/dep/pwta

Further, the NJDEP conducts the following activities:

- Receives test results electronically from laboratories;
- ♦ Within <u>5 business days</u> of receiving a report of water test failure, provides the appropriate local health authority with notice of same;
- Conducts a public information and education program regarding this Act;
- Evaluates the data from the test results to conduct groundwater and contamination studies:
- Provides a general compilation of water test result data arranged by municipality, county,
   etc

Also under this Act, health authorities may (but are not required to) notify property owners within the vicinity of people who receive a failing test result for one or more of the parameters. However, because these individual tests are considered **confidential**, the exact location cannot be identified. The health authority's notice would recommend testing for the parameter(s) at issue. This Act and its implementation will most likely result in increased public awareness of the desirability of testing private drinking water wells.

## Summary of the New Jersey Private Well Testing Act Rules

The Private Well Testing Act Regulations (N.J.A.C. 7:9E) were adopted on September 16<sup>th</sup>, 2002. The final rules are found on the NJDEP PWTA website: www.state.nj.us/dep/pwta. The regulations require wells subject to the Act to be analyzed for those parameters listed in the Act by a New Jersey certified laboratory certified in drinking water methods. The rules

require laboratories to submit test results including additional pertinent information, to the NJDEP electronically <u>within five days</u> after completion of the analyses.

The well sample may be collected by an employee of the certified laboratory or by the laboratory's authorized representative. In addition, the individual who analyzes for pH in the field must be certified, in accordance with N.J.A.C. 7:18-8, for analyze immediately parameters, which includes, pH. As part of the electronic submission to the NJDEP, the X, Y coordinate location of the well (or front door) must be determined using the Global Positioning System (GPS) in accordance with NJDEP standards N.J.A.C. 7:1D. The PWTA rules do not limit who may collect these coordinates provided the NJDEP standards are met.

Well water samples must be collected from an untreated (raw), cold, non-aerated spigot or tap. If a treatment device is on the spigot or tap, the device must be disabled before a sample is collected or collected from a spigot or tap where a treatment device is not present. If the treatment device is on the plumbing entering the house (e.g. POET) and cannot be disabled, the well water sample must be collected from a location outside the house or dwelling and must represent untreated water. Treated samples do not meet the requirements of N.J.A.C. 7:9E and therefore, are not considered to be in compliance with the PWTA rules.

When collecting the well sample for lead, a **flushed** sample must be collected by running the water through the plumbing first for at least two minutes, so that the analysis represents the raw (untreated) water quality of the well and does not represent lead leached from the plumbing system of the house or dwelling.

The requirement in the rules to analyze for mercury, arsenic, and gross alpha particle activity varies depending upon the county where the property containing the well is located (See Appendix 9). In addition, the requirement to analyze for gross alpha particle activity is being phased-in over time beginning in March 2003, and is also based on the county location of the property (See Appendix 9). Cumberland and Gloucester counties are the first counties subject to performing gross alpha testing.

Once the analyses are complete, one laboratory (known as the reporting laboratory) has five business days to provide the analytical results to their client on a standardized form (*Private Well Water Test Reporting Form*) developed by the NJDEP. This new form is available on the NJDEP PWTA website: <a href="www.state.nj.us/dep/pwta">www.state.nj.us/dep/pwta</a>. In addition, also within the five business days, the reporting laboratory must also electronically submit the analytical results as one complete analytical package to the NJDEP. This EDD manual describes how the reporting laboratory transmits the data to the NJDEP.

The NJDEP will forward well test failures to the appropriate local health authority within five business days of electronically receiving the results from the reporting laboratory. A well test failure is defined as any result that exceeds a primary or secondary safe drinking water standard. Laboratories are required to notify directly the local health authority of well test failures for acute parameters, nitrate and coliform.

Local health authorities may choose to issue notification to surrounding homeowners to sample for the parameter(s) of concern. All individual well results submitted in compliance with the PWTA must be kept confidential by state and local government entities. Only

compilations of the data will be made available to the general public as part of public outreach efforts by the NJDEP.

#### **Resources:**

For a copy of the NJ Private Well Testing Act, N.J.S.A. 58:12A-26 et seq: <a href="http://www.njleg.state.nj.us/2000/Bills/PL01/40.HTM">http://www.njleg.state.nj.us/2000/Bills/PL01/40.HTM</a>.

For a copy of the NJ Private Well Testing Act Rule, N.J.A.C. 9:E: <a href="http://www.state.nj.us/dep/pwta">http://www.state.nj.us/dep/pwta</a>

For a copy of the revisions to the Regulations Governing the Certification of Laboratories and Environmental Measurements, N.J.A.C.7:18:

http://www.state.nj.us/dep/pwta

#### 2.0 Introduction: Why the data must be in an electronic format

The NJDEP's Bureau of Safe Drinking Water-Private Well Testing Act (PWTA) Program supplies this manual to assist reporting laboratories on how to submit data to us electronically. The manual is designed to make it easier to submit your electronic data and incorporate it into a data management system. This will help the PWTA Program make more informed decisions about regional and statewide water quality issues, respond more accurately to questions, and improve our ability to review your data more quickly and accurately.

Requirements for electronic data are included in the Private Well Testing regulations which are part of the *New Jersey Administrative Code* (**N.J.A.C. 7:9E**). The regulations require that results from the analysis of private well water samples be provided to the NJDEP in an electronic format. The NJDEP developed an electronic data deliverable format to ensure that laboratories send in test results that comply with the requirements of the law and regulations. In addition to the water test results, the NJDEP requires that the GPS coordinate location of every well be determined in accordance with NJDEP standards and be submitted in State Plane Survey Feet. In this way, accurate data can be entered into our data management system that will be accessible through the NJDEP's GIS System for data sharing and evaluation.

All analytical data submitted from the laboratory for the purposes of complying with the Private Well Testing Regulations must be electronically submitted to NJDEP in one simple electronic text format (.txt). This text file format is specific *only to the Private Well Testing Act Program* and does <u>not apply</u> to any other program within the NJDEP. This simple format contains 4 data sections and each of these sections in the file begins and ends with the following Hyper Text Markup Language (HTML) style tags. For example, the **HEADER SECTION** <Header> briefly defines the type of data being submitted; the **LOCATION**SECTION <Location> briefly describes the locational information of the test requestor, property, and the well tested; SAMPLE SECTION<Sample>, contains information about the location and nature of the well sample collected; and the RESULT SECTION

<RESULT>, contains the results of the analyses of the well water sample. Each section ends with the name of the section in the following format:

There is only type of data file in which to present the required dataset:

#### Data Saved As A Text (.txt) File

A laboratory may save and submit electronic data as a simple "text" file, e.g. ASCII format. It is absolutely essential that the format outlined in this PWTA-EDD Manual is strictly adhered to, with regard to field names, widths, order, formatting, etc.

The NJDEP-PWTA database will only accept the text (.txt) file format!

#### FIELD DEFINITION CONVENTIONS

There are several mandatory fields necessary for the submittal of data. If any of the required fields are not completed or incorrect, then the laboratory will be required to revise and resubmit the data. These mandatory fields are designated in this document as follows:

- Fields marked with a "Y" are **REQUIRED** fields, and must contain an entry.
- Fields marked with an 'N" are optional information fields and will only apply under special circumstances.
- Fields marked with an asterisk (\*) are *conditionally* required fields; only applies to new well construction.

NOTE: All fields must be included in the text file data set sections, even if no data are entered into a field. If all fields are not included, the data set will not be accepted.

**Technical Assistance** on aspects of the electronic data submittal is provided on the PWTA Home Page at http://www.state.nj.us/dep/pwta.

You may also call the Bureau of Safe Drinking Water- Private Well Testing Act **HOTLINE** at **1-(866)-4PW-TEST (479-8378)** or email us at: *submitquestionPWTA@dep.state.nj.us* 

#### 3.0 NJDEP Electronic Submittal Requirements and Process

In accordance with N.J.A.C. 7:9E, all Private Well Testing Act analytical data are required to be submitted <u>electronically</u> to the NJDEP. However, the reporting laboratory must first follow the process below before attempting to submit test results to the NJDEP. <u>NOTE</u>: Once initially established through a NJDEP web-based application, the USER ID and PIN (electronic access code) must accompany ALL future PWTA data submittals from the reporting laboratory.

## A. Step One: Submit a Registration Form and Create a USER PROFILE

- The first step is for the reporting laboratory's lab manager or designee to complete the "Reporting Laboratory Administration Request Form." The Reporting Laboratory Administration Request Form is a registration form that performs two functions. First, if this is the first time the lab registered, it establishes access for the lab to submit electronically to the NJDEP. Second, it establishes a laboratory security administrator at the designated laboratory. The administrator indicated on the form will have access to submit electronically and will also have rights to grant and revoke access (via njdeponline.com) to other users within the same laboratory.
- The reporting laboratory lab manager or assigned designee who completes the *Reporting Laboratory Administration Request (001) Form* must mail (& fax first to expedite) an administratively complete paper copy to:

NJDEP – OQA PO Box 424 Trenton, NJ 08625-0424 Attn: Michael DiBalsi

Fax: 609-777-1774

- Within 24 hours of completing review of the form, the NJDEP will determine if access shall be granted to the lab manager or designee. That individual will be notified of the NJDEP's decision via the lab's e-mail address submitted on the form. The e-mail from the NJDEP will contain your ID and password for access to the system.
- Upon receipt of the NJDEP e-mail you may log in to the NJDEP Online portal. The portal allows users to change or request lost passwords, edit profile information, or add/delete additional users.
- The lab manager or designee only has to <u>register only once</u> as a laboratory security administrator, unless the lab wishes to designate another security administrator representative.
- Once a lab registers, additional users may register to submit test results. The additional
  users do not need to submit a paper form. These users may go directly to njdeponline.com
  and create a "USER PROFILE". Once they successfully create a "USER PROFILE" an e-

mail will be sent to the administrator of the lab. The lab administrator can grant access to the requesting user by selecting Facility Security Admin from the drop down under "Identification" on the left margin menu.

## **B.** Submit Electronic Test Results

- Once access has been granted, the reporting laboratory may begin to submit private well testing results electronically by sending an email with a DOS based text attachment to the NJDEP. The NJDEP-PWTA Program database will not accept any other types of data files, only those DOS based text files labeled (.txt) in the format specified by the NJDEP. Once the NJDEP has received the data submittal an email receipt will be sent to the reporting laboratory that the email and data file has been "received". Once the data file has been processed through the PWTA database and is accepted, a confirmatory email will then be sent to the reporting lab that the data file has been "Accepted".
- The reporting laboratory may choose to utilize Laboratory Information and Management System (LIMS) as the vehicle to generate the analytical results text file for the NJDEP-PWTA Program. Should this method be chosen, the final DOS based text file containing analytical results, must be in the exact format specified by the NJDEP. As an alternative, the NJDEP is also providing a downloadable Excel Spreadsheet (See Section 4 of this manual). The Excel spreadsheet will allow a reporting laboratory to enter data in the spreadsheet and generate a text file automatically in the NJDEP specified format. This text file can then be e-mailed as an attachment to the NJDEP as specified below.
- Once a USERID and PIN are obtained as described above, the EDD text file (.txt) must be e-mailed to the NJDEP as an attachment. The NJDEP e-mail address to submit PWTA test results is: submitresultspwta@dep.state.ni.us.
- The format of the e-mail must be as follows:
  - a.) In the <u>subject line</u> of the email, the phrase <u>NJDEP PWTA</u> in all capital letters <u>must</u> appear. Please do not add any additional or other type of information in the subject line!
  - b.) In the first line of the email text, the following phrase must be entered: <USERID>whatever id you've registered on the 001 form</USERID><PIN> whatever pin you've registered on the 001 form</PIN>. Please note that all brackets and slashes in the HTML style tags must be present as well. In addition, all of the HTML style tags must be capitalized. Please refrain from adding extraneous information in this line.
- <u>NOTE:</u> It is imperative that all reporting laboratories follow the above-referenced instructions exactly as provided to eliminate any potential submittal problems.
- Duplicate EDD files will <u>NOT</u> be accepted by the new PWTA database. If ALL data is exactly the same in a resubmitted (duplicate) file the database will not accept the file and an email will be generated back to the reporting laboratory indicating such.

- Corrected EDD files will be accepted as long as the correction is considered a significant change. Significant changes to an EDD file include:
  - ♦ address changes
  - ♦ block/lot changes
  - municipality/county changes
  - ♦ test requestor information
  - analytical result changes

Once a corrected EDD file is submitted and accepted by the database the initial EDD file will be permanently <u>overwritten</u>. CAUTION: do not resubmit a corrected file until a confirmation email has been sent by the NJDEP indicating the first submission has been successfully received. Sending corrected files within "minutes" of each other will likely result in a file rejection.

Non-PWTA analytes that appear in a submitted EDD file will be rejected by the database (this may happen if the file is generated by a LIMS-the Excel spreadsheet should prohibit this). The same is true for county specific analytes that appear in counties not requiring those analytes. For example, if arsenic results are included in an EDD for a property in Salem County the file will be rejected because it does not contain the proper analytes since arsenic is not a required analyte for Salem.

<u>Minimum</u> computer system requirements for using the njdeponline electronic portal are as follows:

Hardware Requirements: Pentium 133MHz

32Mb of RAM 10 Mb disk space

Software Requirements: Microsoft Windows 95 or higher

Microsoft Excel 97 or higher

Microsoft Internet Explorer or Netscape Navigator Browser (version requirements specified on the nideponline web page

(http://www.njdeponline.com/)

Internet Connectivity: Access to the Internet is required

E-mail account with the ability to send text

attachments

<u>WARNING:</u> Macintosh text files generally do not conform to the same file standards as DOS text files. The NJDEP recommends that Macintosh users may have to utilize additional software to produce the appropriate DOS text file to submit data electronically.

## 4.0 File Format Requirements for Data Submittal via Laboratory Information Management System (LIMS)

## File Format Summary-REVISED

In order to improve our data management capabilities, changes were made to the PWTA database system which precipitated additional changes to the PWTA EDD formatting requirements. The old (September 2002) "format" is represented by Version 1.0.0 while the new (March 2003) format is represented by Version 2.0.0. Version 1.0.0 will only be accepted for about 1 month after the production database goes on line, so please re-program your LIMS as soon as possible! Beyond May 15<sup>th</sup>, 2003 only the latest version 2.0.0 will be accepted by the PWTA database.

In addition, a new hybrid file format (also Version 2.0.0) was created called "Partial EDD" to accommodate EDD partial submissions containing either Gross Alpha results, new microbiological (coliform-total or fecal/E. coli) results (if the old results expired), or both of these results submitted at once. No additional or other parameters will be accepted as partial submissions!

An additional microbiological test result for either fecal coliform or E. coli is required when total coliform is positive. The database will check to ensure that either a fecal coliform or E. coli test result was entered if the total coliform result was positive. At a minimum, an initial Gross Alpha result will be expected by the PWTA database for Atlantic, Burlington, Camden, Cumberland, Gloucester and Salem counties only. A final Gross Alpha result will also be required for those same counties if the initial Gross Alpha result is greater than 5 pCi/l.

Additionally in Version 2.0.0, some original fields were renamed for better clarification purposes, a few new fields were created, and the order of some existing fields were rearranged within the file format (see file format below for details).

As stated in the September 2002 edition of the EDD manual, all PWTA well data from the reporting laboratory must be stored in an ASCII file using the following standard format which has been modified. Maximum length of text fields is indicated. If the information is less than the maximum length, do not pad the record or field with spaces.

Each record must be terminated with a carriage return/line feed (i.e., standard DOS text file). The file can be produced using any software with the capability to create ASCII files. Date is reported as MM/DD/YYYY (month/day/year). Time is reported in military time as HH:MM (hour:minute), thus 3:30 p.m. will be reported as 15:30; since this it's military time AM or PM is not needed and will cause the file to be rejected.

Files must have valid DOS-style names and must end in the extension .txt.

Fields containing commas may be surrounded by double-quotation marks if desired, however since the tab character is the file delimiter it is not necessary.

Some fields are optional. When a field is <u>not</u> listed as "required", this means that a null or blank is appropriate, however, the field must be represented in the data by the use of the tab delimiters.

Please note that if an EDD (full or partial) is resubmitted (i.e. to correct erroneous data), the PWTA database will check the content of the file. If the EDD content differs from the database content, the EDD will be considered a correction and the different data will replace the existing database data. If the EDD content **exactly** matches the database content, then the EDD will be considered a duplicate and rejected.

## **File Format Descriptions**

#### > FORMAT A: New Full EDD

There are now TWO file formats available in which to submit PWTA data: 1.) New Full EDD and 2.) Partial EDD.

The "New Full EDD" is relatively analogous to the original EDD file format described in the September 16<sup>th</sup>, 2002 edition of the EDD manual, however, it does include some organizational changes and a few new fields.

As was the case in the original September 2002 EDD file format, <u>one</u> file is generated and submitted *for each well sample set* collected and analyzed for the Full suite of parameters mandated in the Private Well Testing Regulations (N.J.A.C. 7:9E). Each line of every section must be represented in the text file. The Full set of required parameters must be contained in the text file and electronically submitted.

Submittals containing partial analyses will NOT be accepted by the NJDEP unless they are in the new Partial EDD submittal format and exactly match to the new Partial EDD format described at the end of this section. Only gross alpha (for the counties specified in Appendix 9), and/or microbiologicals (coliform, E. coli, fecal) will be accepted as a partial submittal.

The New Full EDD format has four data sections in the file:

- □ Header
- □ Location (new)
- □ Sample
- □ Result

All sections in the file begin and end with the following HTML style tags:

Version begins with **<HEADER>** and ends with **</HEADER>**Location begins with **<LOCATION>** and ends with **</LOCATION>** (new)
Sample begins with **<SAMPLE>** and ends with **</SAMPLE>** 

Results begins with < RESULTS > and ends with < / RESULTS >

The New Full EDD file is formatted in this manner to assist with visual or manual interpretation of the file, to minimize the overall size of the file and to ensure reliability in processing. Below is a description of each data section that must be included in a proper EDD submittal.

## **Full EDD HEADER Section**

This section contains information related to the EDD itself and related to the valid values in place at the time the file was created. Each row must be represented in the text file.

TABLE 4.1 HEADER Section description of essential elements in Full EDD data set

Row Number	Attribute Name	Maximum Width & Field Type	Require	dDefinition
1	<header></header>	9 Character	Y	Beginning tag for the version area of the file.
2	edd_name	30 Character	Y	Logical name of the EDD – enter the value <b>PWTA-FULL</b>
3	edd_version	20 Character	Y	Version number of the EDD – this value is supplied by the NJDEP, use <b>2.0.0</b> ( <b>new</b> )
4	rvf_set_name	30 Character	Y	Name of the EQuIS reference value file set name applicable for this EDD; use <b>PWTA-FULL.</b>
5	rvf_set_version	20 Numeric	Y	Version number of the reference value file set applicable at the time of submittal of the EDD; use 2.0.0 (new)
6	place_id	10 Numeric	Y	Applicable county code for the property being tested. (See Appendix 1)
7		10 Character	Y	Ending tag for the version area of the file

## **Full EDD- LOCATION Identification Section**

This section contains information related to the Data Provider (laboratory gathering sample and submitting the EDD), the test requestor, the property, and the well.

Some fields that formerly were in the "Sample" Section of version 1.0.0 are now present in the this "Location" Section. Examples of such fields, include the well permit number, installation date, and well driller.

**Conditionally** required fields are indicated by an asterisk (\*).

The following conditional fields are only required for new well construction:

- □ well\_permit\_number
- □ well\_driller\_name
- □ well\_install\_date

NEW-Table 4.2 Location Section description of essential elements of Full EDD data set

Row Number	Attribute Name	Maximum Width	Required	Definition
8	<location></location>	8	Y	Beginning tag for the Location section of the EDD.
9	edd_provider_cert_num	20	Y	NJDEP certification number of the reporting lab submitting the EDD
10	requestor_title	5	N	Title of the of the PWTA requestor. Example: "Mr."
11	requestor_fname	30	Y	First name of the PWTA requestor. Example: "John"
12	requestor_Iname	30	Y	Last name of the PWTA requestor. Example: "Smith"
13	requestor_add1	40	Y	First line of the mailing address of the PWTA requestor. Example: "123 Main Street"
14	requestor_add2	40	N	Second line of the mailing address of the PWTA requestor. Example: "Apartment B-5"
15	requestor_city	30	Y	City of the PWTA requestor. Example: "Nobleton"
16	requestor_state	5	Y	USPS state abbreviation or Province of the PWTA requestor. Example: "OH" for Ohio
17	requestor_postal_code	30	Y	Postal code of the PWTA requestor. If US address – use 9 digit ZIP code. Example: "08625-2500". If last 4 digits are unknown, use - 0000
18	requestor_country_code	5	N	Home country of the PWTA requestor's address. May be blank for USA addresses Example: USA

19	requestor_phone	30	Y	Test requestor phone number (new field)
20	property_add1	40	Y	First line of the property's address Example: "400 Center Street"
21	property_add2	40	N	Second line of the property's address Example: "Suite 5"
22	property_muni_code	4	Y	4 digit code identifying the county and municipality - the first two digits identify the county, the second two digits identify the municipality.  Example: "0213"
23	property_state	5	Y	USPS State code for the property – default value is "NJ"
24	property_postal_code	30	Y	The 9 digit ZIP code of the property Example: "08625-2500". If last 4 digits are unknown, use - 0000.
25	property_block_code	10	Y	Block code of the property. Example: "123"
26	property_lot_code	10	Y	Lot code of the property. Example: "21"
27	x_coordinate	20	Y	X coordinate of the property expressed in state plane survey feet (see pg. 29) Example: "154550"
28	y_coordinate	20	Y	Y coordinate of the property expressed in state plane survey feet (see pg. 29) Example: "345678"
29	coordinate_method_code	20	Y	Code for the method used to determine the coordinates Example: "GPS"
30	reference_point_code	50	Y	Code describing the feature at the coordinate.  Example: "FD" for front door
31	sample_descriptor	10	Y	Well identification (1,2,3), differentiates between sampling points when more than one well is being sampled on the same property. Default is 1.
32	well_permit_number	30	Y*	State of NJ Permit number for the well (required only for new construction)
33	well_driller_name	20	Y*	Name of the well driller (required only for new construction)
34	well_install_date	10	Y*	Date of well installation (required only for new construction)
35	comment	255	N	Test describing the sample or the property. This field can be

				used to describe different samples collected on the same lot/block and municipality code or can indicate Rental Property.
36	report_date	10	Υ	Date the report was completed and sent to the test requestor.
37		9	Υ	Ending tag for the Location section of the EDD.

## **Full EDD SAMPLE Section**

This section has been greatly reduced from Version 1.0.0 and now this portion of the file contains information related to the "sample or samples" collected for purposes of complying with the Private Well Testing Regulations. There should be one sample record for each sample collected. It should be noted that it is necessary to save each sample record prior to creating a new sample record.

One new field that was added is the Field Sample Identification Number is the dedicated number assigned to the field sample by the sample collector. This new data field relates each sample collected to each result set appearing in the Results Section.

The Sample section may have multiple rows if there are multiple samples taken from a well. The ability to enter multiple rows is indicated in the following table by "37+s" where "s" is the sample number (1, 2, ..., 3).

REVISED -Table 4.3 SAMPLE Section description of essential elements of Full EDD data set

Row/ Column Number	Attribute Name	Maximum Width	Required	Definition
37	<sample></sample>	8	Y	Beginning tag for the Sample section of the EDD.
37+s/1	field_sample_code	20	Y	Identification number of the field sample (analogous to lab sample ID for the lab who provided the result)
37+s /2	sample_date	10	Y	Date the well sample was collected.
37+s /3	sample_time	5	Y	Time the well sample was collected
37+s /4	sampler_name	30	Y	Name of the person collecting the well sample
37+s /5	sampler_affiliation	30	Y	Name of the company or agency collecting the well sample.
37+s /6	collection_point_code	20	Y	Code describing where the well sample was collected.

37+s /7	treatment_codes	100	N	Reference codes to be used if treatment type is known-Not available at this time.
37+s /8	treated_sample	15	Y	Valid value of 'untreated' only is available for use.
37+s /9	comment	255	N	Text describing the sample.  This field can be used to describe different samples collected on the same lot, block and municipality code.
38+s		9	Y	Ending tag for the Sample section of the EDD.

## Sample Section Example ("<>" represents a TAB character)

<SAMPLE>

123420030040<20030210<10:00<John Doe<John's Sampling Service<\$PIGO<>N<Comment 123420030062<20030212<10:00<Sue Hu<Sue's Superior Samples<BFRT<>N<Comment 123420030097<20030213<10:00<Leslie Steel<Well Doctors<WH<>N<Comment </SAMPLE>

#### Full EDD RESULT Section-REVISED

This section contains information related to the results and the sample used for testing. The Results section will have multiple rows where each row designates a result for a county-required parameter. Multiple rows are indicated in the following table by "39+S+r" where "S" is the number of sampler and "r" is the result row number.

The Result file includes the Sample Date and Time, Sampler Name, Sample ID Number, Lab ID, the name of the analyte or parameter, the concentration of the result, CAS Number, and other information. Each compound analyzed for in each sample collected requires a result record. You must save each result record prior to creating the next result record.

<u>NOTE</u>: Since coliform (total & fecal) and E. coli are not reported in the same manner as most parameters, please refer to the last section of this document for specific requirements on how to report all microbiological (coliform) results.

In the Result Section, data are arranged in a tabular format. Row 40 of the file contains header fields for the rest of the file describing the contents of that 'column'. Each subsequent row in the file after row 40 contains the information for one result for that sample. Values for each row are separated by the tab character and ending with carriage return/line feed. The last row of the file, after all the results, contains the ending result tag </RESULT>.

MRL/MDC field need not be populated for parameters that do not have a detection limit – specifically data such as pH.

**NOTE:** The reporting laboratory will not be permitted to enter more than the number of characters listed under "width" in Tables 4.1, 4.2, and 4.3.

REVISED -Table 4.4 RESULTS Section description of essential elements of Full EDD data set

Row/ Column Number	Attribute Name	Maximum Width	Required	Definition
39+S	<result></result>	8	Y	Beginning tag for the Result section of the EDD.
40+S+r/ 1	field_sample_code	20	Y	Identification code of the field sample (must be in Sample section)
40+S+r /2	data_provider_cert_num	20	Y	NJDEP certification number of the lab that actually produced the result
40+S+r /3	analysis_date	10	Y	Date the sample was analyzed for that result
40+S+r /4	analysis_time	5	Y	Time the sample was analyzed for that result
40+S+r /5	lab_sample_id	20	Y	Unique identifier for the sample prescribed by the lab.

40+S+r /6	lab_method_code	15	Y	Code for the approved method used to produce the result
40+S+r /7	cas_num	15	Y	CAS number for the parameter analyzed
40+S+r /8	analyte_name	30	Y	Analyte name for the parameter analyzed
40+S+r /9	result_value	20	Y	Numeric result for the parameter. If result is zero or non-detect, insert a zero. Do not leave blank or you will get an error message. Please also see special reporting requirements for microbiological results.
40+S+r /10	result_unit	15	Υ	Units the results are expressed in.
40+S+r /11	detect_flag	1	Y	'Y' if detected at or above the MRL/MDC, 'N' if not detected above the MRL/MDC. NOTE: this value is CASE SENSITIVE-USE UPPER CASE letters only.
40+S+r /12	MRL/MDC	20	Y	The result specific MRL (Minimum Reporting Limit) for a given parameter calculated by the lab for this parameter specifically. For <b>Gross Alpha</b> results this field contains the MDC (Minimum Detectable Concentration).
41+S+r		9	Y	Ending tag for the Result Section of the EDD.

## Result Section Example ("<>" represents a TAB character)

<u>NOTE:</u> Selected rows shown for illustration, a Full EDD requires <u>all parameters</u> specified by the county to be represented in the EDD.

## > FORMAT B - Partial EDD Submittal -Limited circumstances only!

This new file format (also Version 2.0.0) is ONLY to be used for an additional submission of PWTA testing results from the <u>same well that has been previously sampled</u> at an earlier date so that there is an existing data file already present in the NJDEP PWTA database.

There are only **three circumstances** where this format should be used:

- a.) to send gross alpha results representing Cumberland and Gloucester Counties,
- b.) to send an additional microbiological (coliform -total & fecal or E. coli) result(s) because the original microbiological results are greater than 6 moths old and have expired, or
- c.) to send both a and b above.

#### Partial EDD-HEADER Section-NEW

This section contains information related to the EDD itself and the valid values in place at the time it was produced. **It is almost identical to the Full EDD** except the EDD and Ref Set Names now include the word "Partial".

NEW -Table 4.5 HEADER Section description of essential elements of Partial EDD data set

Row Number	Attribute Name	Maximum Width	Required	Definition
1	<header></header>	9	Y	Beginning tag for the Header section of the EDD.
2	edd_name	30	Υ	Logical name of the EDD – enter the value PWTA- <b>PART</b>
3	edd_version	20	Y	Version number of the EDD – this value will be supplied by the NJDEP, <b>2.0.0</b>
4	rvf_set_name	30	Y	Name of the EQuIS reference value file set name applicable for this EDD. Enter the value PWTA-PART
5	rvf_set_version	20	Y	Version number of the reference value file set applicable at the time of submission of the EDD.
6	place_id	10	N	Applicable county code for the property being tested-See Appendix 1)
7		10	Y	Ending tag for the Header section of the EDD.

#### Partial EDD-LOCATION Section-NEW

This section contains information related to the Data Provider (reporting laboratory, laboratory gathering sample and submitting the EDD), the requestor, the property, and the well. It is <u>identical to the Full EDD</u> except that entries for a new well are removed. This is because the EDD is a second or possibly third submission for the same well previously sampled for all PWTA mandated parameters and the NJDEP should already have an existing data file for the subject well and property.

Please note that the Sample Descriptor field previously in Version 1.0.0 is present in the Partial EDD format only and does appear in the Full EDD format. This file will help differentiate between sampling points when 1 or more samples are collected from the same property. The default value is 1.

NEW -Table 4.6 LOCATION Section description of essential elements of Partial EDD data set

Row Number	Attribute Name	Maximum Width	Required	Definition
8	<location></location>	8	Y	Beginning tag for the Location section of the EDD.
9	edd_provider_cert_num	20	Y	NJDEP certification number of the lab submitting/reporting the EDD to NJDEP
10	requestor_title	5	N	Title of the of the PWTA requestor.
11	requestor_fname	30	Y	First name of the PWTA requestor.
12	requestor_Iname	30	Y	Last name of the PWTA requestor.
13	requestor_add1	40	Y	First line of the mailing address of the PWTA requestor.
14	requestor_add2	40	N	Second line of the mailing address of the PWTA requestor.
15	requestor_city	30	Υ	City of the PWTA requestor.
16	requestor_state	5	Y	USPS state abbreviation or Province of the PWTA requestor.
17	requestor_postal_code	30	Y	Postal code of the PWTA requestor. If US address, use 9 digit ZIP code. If last 4 digits are unknown use -0000
18	requestor_country_code	5	N	Home country of the PWTA requestor's address. May be blank for USA addresses
19	requestor_phone	30	Y	Requestor phone number. Include area code. Format Example: (609) 555-1212
20	property_add1	40	Y	First line of the property's address
21	property_add2	40	N	Second line of the property's

				address
22	property_muni_code	4	Y	4 digit code identifying the county and municipality - the first two digits identify the county, the second two digits identify the municipality.
23	property_state	5	Y	USPS State code for the property – default value is "NJ"
24	property_postal_code	30	Y	The 5 digit ZIP code of the property
25	property_block_code	10	Y	Block code of the property.
26	property_lot_code	10	Y	Lot code of the property.
27	x_coordinate	20	Y	X coordinate of the property expressed in state plane feet.
28	y_coordinate	20	Y	Y coordinate of the property expressed in state plane feet.
29	coordinate_method_code	20	Y	Code for the method used to determine the coordinates
30	reference_point_code	50	Y	Code describing the feature at the coordinate.
31	sample_descriptor	10	Y	Well identification (1,2,3), differentiates between sampling points when more than one well is being sampled on the same property. Default is 1.
32	Comment	255	N	Text describing the sample. This field can be used to describe different samples collected on the same lot, block and municipality code.
33	report_date	10	Y	Date the report was completed and sent to the requestor.
34		9	Y	Ending tag for the Location section of the EDD.

#### Partial EDD-SAMPLE Section-NEW

Data fields are identical to Full EDD format.

This section contains information related to the sample or samples taken from the well. The Sample section <u>may have multiple rows if there are multiple samples taken</u> from a well. The ability to enter multiple rows is indicated in the following table by "35+s" where "s" in the sample number (1, 2, ..., 3).

Note that the Field Sample ID number is also present in this section, as it was in the Full EDD Sample Section.

NEW -Table 4.7 SAMPLE Section description of essential elements of Partial EDD data set

Row/ Column Number	Attribute Name	Maximum Width	Required	Definition
35	<sample></sample>	8	Y	Beginning tag for the Sample section of the EDD.
35+s/1	field_sample_code	20	Y	Identification code of the field sample (analogous to lab sample ID for the lab who provided the result)
35+s/2	sample_date	10	Y	Date the sample was collected
35+s/3	sample_time	5	Υ	Time the sample was collected
35+s/4	sampler_name	30	Υ	Name of the person collecting the sample
35+s/5	sampler_affiliation	30	Y	Name of the company or agency collecting the sample.
35+s/6	collection_point_code	20	Y	Code describing where the sample was collected.
35+s/7	treatment_codes	100	N	Not used for untreated samples - only populated it field 27 has a value of treated.
35+s/8	treated_sample	15	Y	Valid values 'treated' or 'untreated'
35+s/9	Comment	255	N	Text describing the sample. This field can be used to describe different samples collected on the same lot, block and municipality code.
36+s		9	Υ	Ending tag for the Sample section of the EDD.

#### **Partial EDD-Results Section**

Data fields are identical to Full EDD format.

This section contains information related to the results and the sample used for testing. The Results section will have multiple rows where each row designates a result for a county-required parameter. Multiple rows are indicated in the following table by "37+S+r" where "S" in the number of sampler and "r" is the result row number.

NEW -Table 4.8 RESULTS Section description of essential elements of Partial EDD data set

Row/ Column Number	Attribute Name	Maximum Width	Required	Definition
37+S	<result></result>	8	Y	Beginning tag for the Result section of the EDD.
38+S+r/ 1	field_sample_code	20	Y	Identification code of the field sample (must be in Sample section)
38+S+r /2	data_provider_cert_num	20	Y	NJDEP certification number of the lab that actually produced the result
38+S+r /3	analysis_date	10	Y	Date the sample was analyzed for that result
38+S+r /4	analysis_time	5	Y	Time the sample was analyzed for that result
38+S+r /5	lab_sample_id	20	Y	Unique identifier for the sample in the lab.
38+S+r /6	lab_method_code	15	Y	Code for the approved method used to produce the result
38+S+r /7	cas_num	15	Y	CAS number for the parameter analyzed
38+S+r /8	analyte_name	30	Y	Analyte name for the parameter analyzed
38+S+r /9	result_value	20	Y	Numeric result for the parameter. If the result is zero or non-detect, insert a zero. L Do not leave bland or you will get an error message. Please also see special reporting requirements for microbiological results.
38+S+r /10	result_unit	15	Y	Units the results are expressed in.
38+S+r /11	detect_flag	1	Y	'Y' if detected, 'N' if not detected. Note: this value is case sensitive, use UPPER CASE letters only.
38+S+r /12	MRL/MDC	20	Y	The result specific MRL (Minimum Reporting Limit) for a given parameter calculated

				by the lab for this parameter specifically. For <b>Gross Alpha</b> results this field contains the MDC (Minimum Detectable Concentration).
39+S+r		9	Υ	Ending tag for the Result Section of the EDD.

## 5.0 File Format for Data Submittal Using the Downloadable PWTA Excel Spreadsheet From the NJDEP PWTA Website: www.state.nj.us/dep/pwta

## **Introduction-Version 2.0.0 (NEW)**

This section describes the process for producing an EDD (electronic data deliverable) file using a new specially formatted Microsoft Excel® spreadsheet file (.xls) that is available on the NJDEP's PWTA website at: <a href="www.state.nj.us/dep/pwta">www.state.nj.us/dep/pwta</a>. The version number of this spreadsheet has been modified to 2.0.0. This spreadsheet can be directly downloaded from the website and data can be directly entered into the spreadsheet for your convenience. The spreadsheet was modified to be compatible with revisions made to the PWTA database. The new spreadsheet may be used to submit two types of EDD's: Full EDD or Partial EDD. The Full EDD must be used when submitting a full set of required parameters for compliance with N.J.A.C. 7:9E-2.1 or a Partial EDD must be used to submit a partial set of parameters for microbiological (coliform) and/or gross alpha results if a pre-existing EDD file already exists in the PWTA database.

Just like the September 2002 Spreadsheet (Version 1.0.0), once the data is entered into the new spreadsheet properly, two separate files may be easily created, one is an Excel (.xls) file, and the other is a text (.txt) file. The .txt file is the EDD file that must be sent as an email attachment to the NJDEP-PWTA database.

**NOTE:** The September 2002 Version 1.0.0 spreadsheet will *only be accepted for several weeks following the new system startup date of April 23<sup>rd</sup>*, 2003. Beyond June 1st, 2003 only Version 2.0.0 will be accepted by the database. Please plan your business practices accordingly.

The new spreadsheet contains several panes of information related to the property, sample collection, and individual analytical results of the required parameters. Certain fields of data/information are required, others are conditional based on certain situations. You must complete ALL of the required fields or you will not be able to produce the text (.txt) file automatically; the system will not allow it.

Essentially there are four simple steps involved in completing the PWTA EDD Excel Spreadsheet that are summarized below:

#### Steps for producing the EDD-Version 2.0.0

1. Select the "Demographic Information" tab and enter the required

information – required information is indicated by the 'Yes' in the 'Required' column. Data entry fields are indicated in light blue.

- **2.** Select the **''Sample and Report Information''** tab and enter the required information required information is indicated by the "Yes" in the "Required" column. Data entry fields are indicated in light blue.
- **3.** Select the "**Results**" tab and enter results for all parameters tested. Note that all the parameters required for a sample must be submitted together. By clicking the "**Drop Components into Sheet**" button the applicable parameters for the county in which the well is located (as completed in the Demographic Tab) will be automatically inserted into the sheet.
- **4.** After completing all results for this test, click the "Check Data & Produce EDD" to check the data entry and produce the EDD text (.txt) file to be emailed as an attachment to the NJDEP PWTA database. If any of the fields were not properly filled in, then that spreadsheet will generate an error log tab. The error log tab will indicate the sheet and cell # that had an error . The error log tab will also describe the specific error.

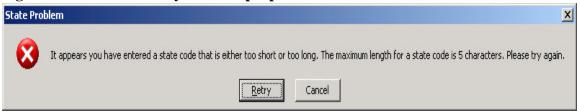
Once these steps are completed and the data has been properly checked (step 4.) the data text file is now ready for electronic submittal to the NJDEP-Private Well Testing database. Refer to Section 3: Electronic Data Submittal and Process of this manual to initiate the submittal process.

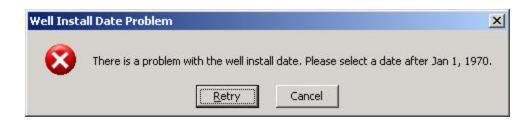
**NOTE:** This downloadable spreadsheet is compatible with Microsoft 97, 2000 and XP (2002) for the Windows operating system.

#### **ERROR INFORMATION:**

<u>IMPORTANT NOTE:</u> This spreadsheet continually checks the user's data entry as they progress through the sheets. Encountering error messages similar to the ones below means data entered into a cell violates the rules set up for that field. The data entered must be corrected before moving on to the next cell.

Figure 1. Excel Data Entry Error Pop-Up Screens





For this reason it is <u>VERY IMPORTANT</u> to refer to all of the material in this manual to provide assistance with field formatting rules.

## **Getting Started:**

#### **Basic Information**

Producing an EDD text file involves entering information on each of the *three* "data" tabs in the Excel spreadsheet. However, an additional "Instructions" tab (#1. Below) with a synopsis of this document is also included in the spreadsheet for your convenience.

The three data tabs may be accessed by clicking the small tabs at the bottom of the sheet labeled "Demographic Information", "Sample and Report Information" and "Results" (refer to the figure below).

Complete each tab by selecting or entering information for all of the fields where data are required and moving on to the next tab. Once all the tabs are completed the EDD needs to be checked and produced by clicking the "Check data and Produce EDD" button at the top of the results workbook.

#### 1. Instructions Tab

Simple instructions can be found in the first tab, "Instructions". Follow them exactly.

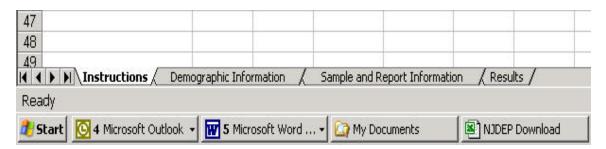


Figure 2. – Initial Tabs of the Excel Spreadsheet (No Change)

## 2. Demographic Information Tab

This tab allows information to be entered about the person who requested the well test and the property at which the well sample was collected [Figure 3]. The Private Well Testing Act requires this information to be submitted with the analytical results.

Data entry fields appear as lightly blue shaded cells. Required cells are indicated by a "Yes" in the "Required?" column as indicated below.

Clicking on any light blue cell will expose a pop-up message providing instructions on the data required for that cell.

(a) File Edit View Insert Figural Icols Data Window Holp 18 X 日曜日 日日で 本版画グローコー 株字 S A 公共 値を表 1094 · 日 \* 10 \* R / U --- 174 (8. %) New Jersey Department of Environmental Protection Private Well Testing Act Instructions Sample and Report Information **EDD Spreadsheet** Version: 2.0.0 Results 5 6 7 8 9 10 11 12 13 14 15 16 17 18 PWTA Test Requestor Information Field Required? Data Title Na First Name Torr Yes Last Name Yes Address Line 1 101 East Main St. Yes Address Line 2 No City Warren Yes State NJ Yes Postal Code 06/65-0000 Yes No Country USA 19 20 21 22 23 24 25 26 Property Information Address Line 1 7-11 Cherry Blassom Rd Yes Na Address Line 2 Suite 55 Yes Select County & Municipality County 05 Municipality 0508 Yes Postal Code 06765 Yes Block Code 99-99 Yes Lot Code 88-88 Yes X Coordinate 854321 Yes Y Coordinate 876543 Yes GPS 29 Coordinate Method Yes 30 Reference Point WHR 32 33 | 4 4 9 H\ Instructions \ Demographic beformation \ Sample and Repost bloamation \ / Results / 🧝 Start 🦪 🚑 😘 Novel Group/wise - Malbox 🔀 Microsoft Excel - NJD... **現象を設置したりをできます。** 11-44AM

Figure 3. Test Requestor Information Sheet (REVISED)

#### Pull Down Menus in the Demographics Sheet

For your convenience, four fields in this sheet offer a pull-down menu to select the proper code for the well sample data being entered. These four fields are:

**1.** County – Selecting the 'Select County & Municipality" button to the far right of the page will permit selection of the county for which the well testing was done [Figure 4]. Selecting the correct county will configure the next pull-down box (municipality) to contain only the list of municipalities for that selected county. (For a list of all 21 counties in New Jersey please refer to Appendix 1).

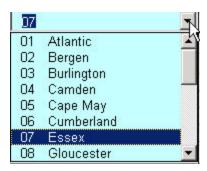


Figure 4. County Selection Pull-Down

2. Municipality – Selecting the correct county will configure the next pull-down box (municipality) to contain only the list of municipalities for that selected county. (For a complete list of acceptable municipalities in each of the 21 New Jersey counties please refer to Appendix 2). When done click on the continue button to enter the data automatically.

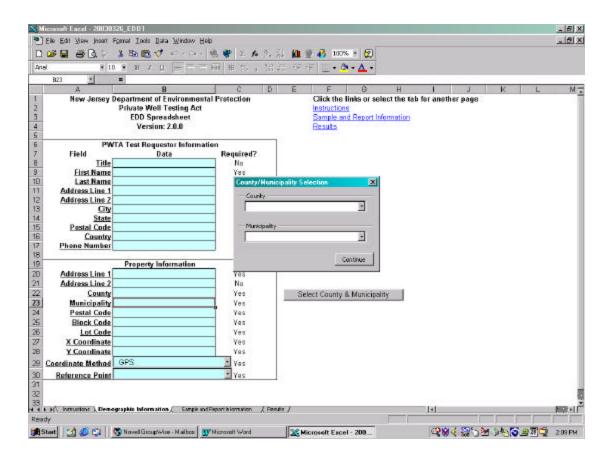


Figure 5. County-Municipality Selection Pull-Down

- **3.** Coordinate Method –This valid value is displayed using the pull-down menu which describes the method by which the X,Y location coordinates of the well were determined. The Private Well Testing Act regulations require GPS coordinates in State Plane Survey Feet.
- **4. Reference Point** This pull-down menu contains the allowable values for reference points at which the well coordinates were determined. There are various choices to choose from that will be dictated by specific site/property conditions. Choose the appropriate reference point that was utilized at the property (See below and Appendix 4).

TABLE 5.1 Acceptable Reference Codes Describing Origin of GPS Coordinates

REFERENCE_POINT_CODE	DESCRIPTION
WHR	at raised wellhead
WHF	at well head-pit/flush mount
FD	front door
SCP	Sample collection point

#### 3. Sample and Report Information Tab

This tab has been greatly modified from the original 1.0.0 version described in the September 16<sup>th</sup>, 2002 edition. Information has been reorganized and some new fields were created for clarification purposes. For example, a new field called Full or Partial Testing exits to better clarify the type of data submission sent to NJDEP. This field contains a drop-down menu consisting of two choices (Full or Partial). Since gross alpha, microbiological, and/or both results may be collected and submitted independently from an initial sampling event that has taken place at an earlier time, the NJDEP has created a Partial EDD spreadsheet for this situation. By clicking on "Partial" in drop-down menu, the spreadsheet will auto-populate the microbiological and/or radiological fields (Cumberland & Gloucester Counties only) in the Results Tab once the "Drop Components into Sheet" button is chosen. By clicking on "Full" in the drop-down menu, the spreadsheet will auto-populate all PWTA county required analytes, Chemical Abstract Service (CAS) Numbers, and Units in the Results Tab once the "Drop Components into Sheet" button is chosen

Major organizational changes occur in this tab. A new field called Field Sample ID was created to link the information between sampling event and results generated by analysis. The Field Sample ID is the number assigned in the field to a given sample collected by the lab field personnel or the lab's authorized agent. All of the pertinent information about the sample collected is recorded in this tab, such as sample date, sample time, sampler name, sampler affiliation, type of sample collected (untreated), etc.

Information regarding a newly drilled well (<1 year old) is now collected in this tab.

Also collected in this tab is the pertinent information about the reporting lab's certification number and report date.

A drop-down list is available for populating the Collection Point Code field (Refer to **Appendix 6** for acceptable values). No entries other than those listed in the pull down list are permitted.

See spreadsheet (Figure 6 below) for further details.

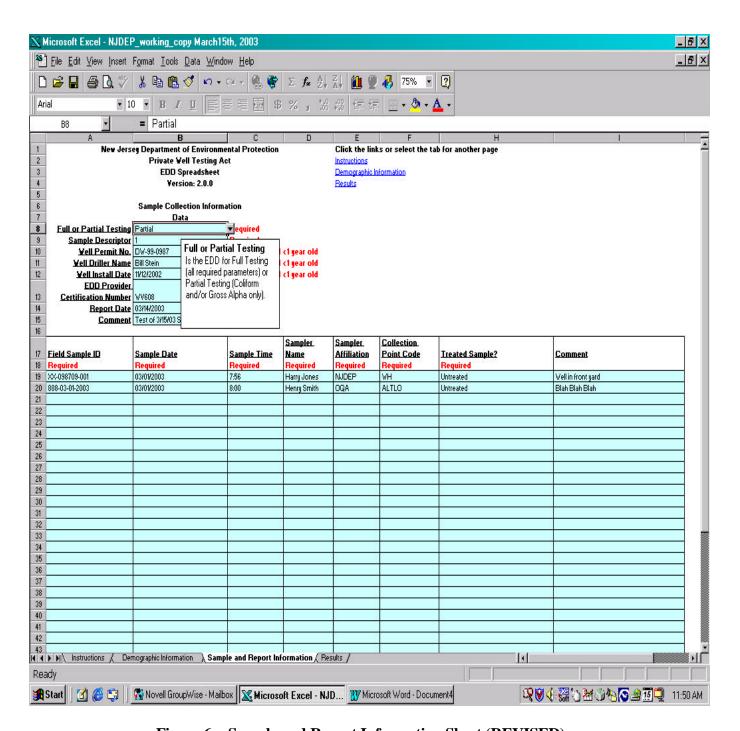


Figure 6. - Sample and Report Information Sheet (REVISED)

Data entry fields appear as lightly blue shaded cells. Required cells are indicated in red. As before, clicking on any light blue cell will expose a pop-up message providing instructions on the data required for that cell.

The Private Well Testing Act Regulations require that an <u>untreated</u> (raw) water sample be collected. Therefore, the Treated Sample drop-down menu only contains one selection: "untreated". Treated samples do not meet the requirements of N.J.A.C. 7:9E. However, the NJDEP is collecting treatment information in the comment field in the Sample and Report worksheet.

#### 4. Results Tab - MODIFIED

This tab is greatly modified from the original 1.0.0 version described in the September 16<sup>th</sup>, 2002 edition. Information is reorganized and some new fields were created for clarification purposes. For example, the new field called **Field Sample ID** Code discussed previously in the Sample Section, appears again in the RESULTS tab and relates the field sample code to the lab sample ID number. For your convenience and in this tab only, a drop-down menu was added to the field sample ID number field so that you may select the correct field sample ID code (you previously entered in the Sample Tab) for each line of results.

This tab still assembles the analytical results from an individual well test that was tested for purposes of complying with the PWTA regulations. Note that one row should be completed for each parameter analyzed <u>AND</u> all required parameters (based on county location of the well -Refer to Appendix 9) must be submitted in one file.

As in the previous spreadsheet version 1.0.0, clicking on the '**Drop Components into Sheet**' button will insert the CAS Number, Analyte Name and Units of concentration for the required PWTA parameters for the county previously selected in the "Demographics" tab. This is true for both the Full EDD spreadsheet and the Partial EDD spreadsheet. In addition, the Full EDD spreadsheet will initially auto-populate Total Coliform only. If Total coliform is negative, there is no need to for the user to proceed with trying to enter fecal coliform or E. coli results. Either one is only required when total coliform is positive (N.J.A.C. 7:9E-2.1).

As seen in Figure 7 below, the Partial EDD sheet will auto-populate with both microbiological and radiologicals (Cumberland and Gloucester Counties) only or will auto-populate with microbiologicals only for the remaining counties depending on which selection the user chooses. The spreadsheet will prompt the user based on the result values submitted.

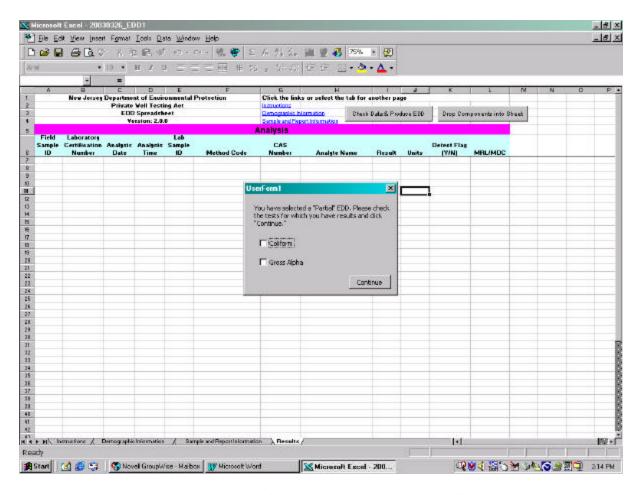


Figure 7.- Results tab of partial EDD indicating coliform and gross alpha parameter choices

Historically entering microbiological results has been problematic and therefore, the spreadsheet has been revised from Version 1.0.0. The spreadsheet now prompts the user to enter appropriate result values and analytes. When Total Coliform is positive, a pop-up window appears and instructs the user on how to proceed with entering either fecal or E. coli data. If the user does not follow the instructions, the EDD can not be validated.

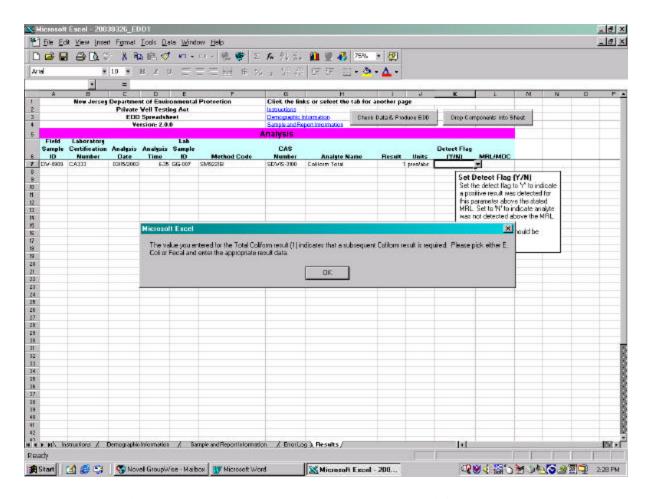


Figure 8.- Message box on the Results tab requiring the user to enter results for a subsequent coliform test (fecal or E. coli.)

If Total Coliform is positive, a number 1 must be entered in the result field, and the detect flag set to "Y". If Total Coliform is non-detect, enter a zero in the result field, and set the flag to "N". As shown in Figure 8, if Total Coliform is positive, the spreadsheet will automatically prompt you to enter another microbiological result, either for fecal coliform or E. coli. The user will not be able to proceed in the spreadsheet and create an EDD if coliform results are entered properly. Pay special attention to these fields.

For results generated in Cumberland and Gloucester Counties, entering Gross Alpha results is similar to the microbiological results. A pop-up window appears and prompts the user the enter the appropriate values and analytes. In the case of Gross Alpha, an *initial* gross alpha result must be entered into the appropriate data field, and if the result is greater than 5pCi/l, the spreadsheet will prompt the user for a gross alpha *final* result. The user will not be able to proceed in the spreadsheet and create an EDD if gross alpha results (when applicable) are entered properly. Pay special attention to these fields.

#### Excel Tips:

- a.) Clearing a cell or range of cells can be accomplished by:
  - 1) Selecting the cells or range
  - 2) Right clicking with the mouse
  - 3) Selecting 'Clear Contents' from the menu that pops up after right clicking
- b.) Identical entries for multiple rows may be made by entering one row or range of data then cutting and pasting that data into the appropriate range of cells.
- c.) Pull-down lists are available for populating the fields below. No entries other than those listed in the pull down list are permitted.
  - "Field Sample Code"-designation assigned by the field personnel collecting the well sample-drop down list is generated from the information previously entered in the Field Sample ID Code within the "Sample & Report Information" Tab
  - "Method Codes" approved drinking water method(s) utilized during analysis (Refer to Appendix 7 for acceptable methods)
  - "Detect Flag " refers to the presence or absence ("Y" or "N") of an analyzed parameter above the MRL. This value is case sensitive! Please use UPPER CASE letters only. A "Y" present in this field does NOT automatically mean the results are above an applicable drinking water standard.
  - "Unit" refers to units of concentration acceptable units are:
    - □ micrograms/liter (ug/l)
    - □ milligrams/liter (mg/l) (used for Iron and Manganese only)
    - □ presence/absence (pres/abs)-(used for microbiological results only)
    - □ picocuries/liter (pCi/l) (used for radiological results only)
    - □ standard units (su) (used for pH only)

Another revision worth pointing out is that when analytical results are non-detect a zero must be entered into the Result Field. Do NOT leave the result field BLANK for any given parameter except for fecal or E. coli whichever was not tested. In addition, be sure that for

zero's in the result fields the "detect flag" field for that parameter is "N", otherwise the EDD will fail.

**Figure 9** below is an example of how the new spreadsheet (version 2.0.0) looks—refer to the valid values documentation in Appendices 7, 8 and 9 for the acceptable drinking water analytical methods, required parameters by county and CAS numbers, etc. listed for your use.

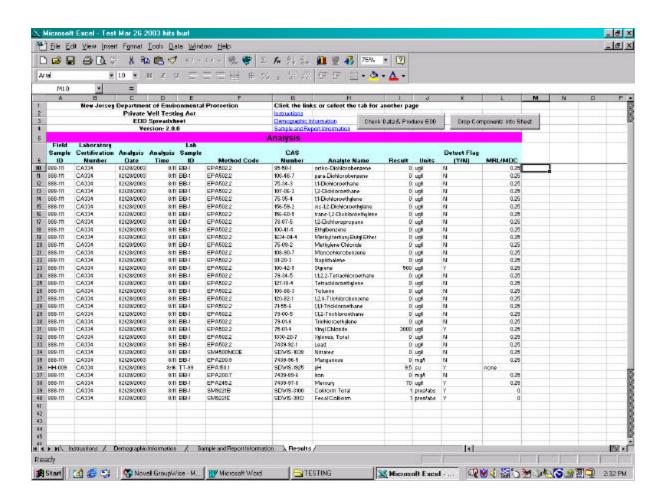


Figure 9. Results Tab Depicting Revised Spreadsheet Layout - NEW

#### 5. Producing the EDD File

After completing all three tabs of the spreadsheet, and assuming that all of the required fields have been completed and no error messages have been left uncorrected, the workbook is ready to produce the EDD text file.

Clicking the "Check Data & Produce EDD" button calls routines programmed within the spreadsheet that will review the data that you entered into the panels.

If no errors are found the sheet will prompt for a filename. **Enter a filename that is meaningful to you for future retrieval.** You will then be asked if you want the routine to save the file as a spreadheet (.xls) and a text (.txt). Clicking "OK" will save the formatted text (.txt) version of the spreadsheet which is now ready to be emailed to the NJDEP for submittal. Both the .xls file and the .txt. file will be saved to the same directory which will appear automatically in a pop-up window. Note: Do not zip the EDD text file(s) when submitting them to the NJDEP. Below are examples of Version 2.0.0 text files created from the new spreadsheet for a Full set of parameters and a Partial set of parameters.

#### A. Full EDD Text File Format:

```
<HEADER>
                PWTA-FULL
edd name
edd version
                2.0.0
rvf_set_name
                PWTA-FULL
rvf_set_version 2.0.0
place_id 13
</HEADER>
<LOCATION>
edd_provider_cert_num WV608
requestor_title
requestor_fname Bruce
requestor_lname Springsteen
requestor_add1 56 Boardwalk
requestor add2
requestor_city
               Asbury Park
requestor_state NJ
requestor_postal_code
                        07654-1234
requestor_country_code USA
requestor_phone 7775551111
property_add1
               78 Thunder Road
property_add2
property muni code
                        1305
property_state NJ
property_postal_code
                        123456789
property block code
                        66B
property_lot_code
                        12A
x_coordinate
                654321
y_coordinate
                456768
coordinate_method_code GPS
                        WHF
reference_point_code
submit code
                        DW-001
well permit number
well_driller_name
                        Sam Jones
well install date 10/20/02
comment
                Full EDD Example
report_date
                03/14/2003
</LOCATION>
<SAMPLE>
                                                                        sampler_affiliation
field sample code
                        sample date
                                        sample_time
                                                        sampler_name
       collection point code
                               treatment_codes treated_sample comment
```

TT-009	02/02/20	003	8:45	Joe Smit	h	DEP	BT		Untreate	d		
XX-0012	2	02/03/200	)3	8:46	Ken Jon	es	NJ	BFRT		Untreated		
<td></td>												
field_sa	mple_cod	le	data_pro	vider_ce	rt_num	analysis	_date	analysis_	_time	lab_sample	_id	
	lab_met MRL/M	hod_code	cas_num	nanalyte_	name	result_v	alue	result_u	nit	detect_flag	5	
TT-009		03/01/200	)3	8:44	CC-98	EPA524.	2	71-43-2	Benzene	7 ug	g/l	Y
TT-009		03/01/200 N	)3 0.5	8:44	CC-98	EPA524.	2	56-23-5	Carbon 7	Γetrachlorid	e	0
TT-009	00990	03/01/200	)3	8:44 0.3	CC-98	EPA524.	2	541-73-1		meta-Dichl	orober	nzene
TT-009	00990 ug/l	03/01/200		8:44	CC-98	EPA524.	2	95-50-1	ortho-Di	chlorobenz	ene	0
TT-009	00990	03/01/200	)3	8:44 0.5	CC-98	EPA524.	2	106-46-7		para-Dichle	oroben	zene
TT-009	00990 ug/l	03/01/200		8:44	CC-98	EPA524.	2	75-34-3	"1,1-Dic	hloroethane	;"	0
TT-009		03/01/200	)3	8:44 0.4	CC-98	EPA524.	2	107-06-2		"1,2-Dichlo	oroetha	ane"
TT-009		03/01/200		8:44	CC-98	EPA524.	2	75-35-4	"1,1-Dic	hloroethyle	ne"	0
TT-009		03/01/200		8:44	CC-98	EPA524.	2	156-59-2		"cis -1,2-		
Dichloro TT-009	oethylene 00990	e" 03/01/200		U	N CC-98	0.5 EPA524.	2	156-60-5		"trans-1,2-		
	oethylene			0	N	0.3						
TT-009	00990 ug/l	03/01/200 N	)3 0.5	8:44	CC-98	EPA524.	2	78-87-5	"1,2-Dic	hloropropai	ne"	0
TT-009	00990 ug/l	03/01/200 N	)3 0.5	8:44	CC-98	EPA524.	2	100-41-4		Ethylbenze	ene	0
TT-009	00990	03/01/200		8:44	CC-98	EPA524.	2	1634-04-	4	Methyl tert	iary B	utyl
Ether TT-009		03/01/200	)3	0.5 8:44	CC-98	EPA524.	2	75-09-2	Methyle	ne Chloride		0
TT-009		03/01/200		8:44	CC-98	EPA524.	2	108-90-7		Monochlor	obenz	ene
TT-009		03/01/200		0.3 8:44	CC-98	EPA524.	2	91-20-3	Naphtha	lene 0		ug/l
TT-009		0.25 03/01/200	)3	8:44	CC-98	EPA524.	2	100-42-5		Styrene 0		ug/l
TT-009	N 00990	0.2 03/01/200			CC-98	EPA524.	2	79-34-5	"1,1,2,2-	Tetrachloro	ethane	e"
TT-009		03/01/200	)3		CC-98	EPA524.	2	127-18-4		Tetrachlor	oethyle	ene
TT-009		03/01/200		0.5 8:44	CC-98	EPA524.	2	108-88-3		Toluene 0		ug/l
TT 000	N	0.3	2	0.44	CC 00	ED 4 50 4	2	120 02 1		<b>!!1 2 4</b>		
TT-009	obenzene	03/01/200			CC-98 N	EPA524. 0.3	<i>L</i>	120-82-1		"1,2,4-		
TT-009	00990	03/01/200	)3		CC-98	EPA524.	2	71-55-6	"1,1,1-Tr	richloroetha	ne"	0
TT-009		03/01/200	0.3 )3 0.5	8:44	CC-98	EPA524.	2	79-00-5	"1,1,2-Tr	richloroetha	ne"	0
TT-009	ug/l 00990 N	03/01/200 0.5		8:44	CC-98	EPA524.	2	79-01-6	Trichlor	oethylene0		ug/l

TT-009	00990	03/01/20	03	8:44	CC-98	EPA524.	2	75-01-4	Vinyl Ch	loride	0	ug/l
TT-009	N 00990 ug/l	0.5 03/01/20 N	03 0.5	8:44	CC-98	EPA524.	2	1330-20-7	7	"Xylene:	s, Total"	0
TT-009	00990 N	03/01/20 0.5		8:44	CC-98	EPA200.	7	7439-92-	1	Lead	0	ug/l
TT-009	00990	03/01/20	03	8:44	CC-98	SM92231	BUV	SDWIS-3	3100	Coliform	Total	1
TT-009	pres/abs 00990	03/01/20	1 03	8:44	CC-98	SM 9221	D	SDWIS-3	3101	E. coli	0	
TT-009	pres/abs 00990	03/01/20	03	8:44	CC-98	SM 9221	Е	SDWIS-3	3101	Fecal Co	liform	
TT-009	pres/abs 00990	03/01/20	03	8:44	CC-98	EPA200.	9	7439-89-6	5	Iron	0	mg/l
TT-009	N 00990 N	0.3 03/01/20 0.5	03	8:44	CC-98	EPA300.	0	SDWIS-	1038	Nitrates	0	ug/l
TT-009	00990	0.5 03/01/20 N	03 0.5	8:44	CC-98	EPA200.	9	7439-96-	5	Mangan	ese	0
TT-009	mg/l 00990	03/01/20		8:44	CC-98	EPA150.	1	SDWIS-	1925	pН	8	su
XX-0012	ug/l	none 00990 Y	03/01/20 0.5	03	8:44	CC-98	EPA200.	9	7439-97-	6	Mercury	13

#### B. Partial EDD Text File Format:

<HEADER>

edd\_name PWTA-PARTIAL

edd\_version 2.0.0

rvf\_set\_name PWTA-PARTIAL

rvf\_set\_version 2.0.0

place\_id 06

</HEADER>

<LOCATION>

edd\_provider\_cert\_num WV608

requestor\_title Mr

requestor\_fname Bruce

requestor\_lname Springsteen

requestor\_add1 78 Boardwalk

requestor\_add2

requestor\_city Rumson

requestor\_state NJ

requestor\_postal\_code 123456789

requestor\_country\_code USA

requestor\_phone 6098984444

property\_add1 78 Thunder Road

property\_add2

property\_muni\_code 0601

property\_state NJ

property\_postal\_code 987654321

property\_block\_code 17.5

property\_lot\_code 59.5

x\_coordinate 654321

```
y_coordinate
               456768
coordinate_method_code GPS
                       WHF
reference_point_code
sample_descriptor
comment
               Partial EDD Example
               03/14/2003
report date
</LOCATION>
<SAMPLE>
field_sample_code
                       sample date
                                       sample time
                                                       sampler name
                                                                       sampler affiliation
       collection_point_code
                               treatment_codes treated_sample comment
                                                       BT
YY-008 02/02/2003
                       8:45
                               Joe Smith
                                               DEP
                                                                      Untreated
DW-009 02/03/2003
                       8:46
                               Ken Jones
                                               NJ
                                                       BFRT
                                                                       Untreated
</SAMPLE>
<RESULT>
field sample code
                       data provider cert num analysis date
                                                               analysis time
                                                                               lab sample id
       lab_method_codecas_numanalyte_name
                                               result_value
                                                               result unit
                                                                               detect_flag
       MRL/MDC
                                                                                       Coliform
YY-008 CA456 02/10/2003
                               5:45
                                       XYZ-123
                                                       SM 9221D
                                                                       SDWIS-3100
               pres/abs Y
Total
      1
YY-008 CA456 02/10/2003
                               5:45
                                       XYZ-123
                                                       SM9223BUV
                                                                       SDWIS-3101
                                                                                       E. coli
       pres/abs N
                               5:45
                                       XYZ-123
                                                                       SDWIS-3101
                                                                                       Fecal
YY-008 CA456 02/10/2003
                                                       SM 9221E
                       pres/abs Y
Coliform
               1
DW-009 DE001
               02/11/2003
                               7:34
                                       GA-001 NJDEP48HRGAT
                                                                       SDWIS-4200I
                                                                                       Gross Alpha
Initial 7
               piC/L
                               1.3
                      Y
                               2:23
DW-009 DE001
               02/12/2003
                                       GA-001 NJDEP48HRGAT
                                                                       SDWIS-4200F
                                                                                       Gross Alpha
Final
       16
               piC/L Y
                               1.3
</RESULT>
```

Once these types of files are created you are now ready to begin the data submittal process to the NJDEP. Please refer to Section 3 of this manual for further guidance on data submittal process.

#### 6. Errors Tab

If errors are detected in the underlying data they must be corrected before saving the data for submittal to the NJDEP. Any errors detected after clicking the "Check Data & Produce EDD" button on the results tab causes an "Error Log" tab to be created, and the focus of the workbook is set to that tab automatically [Figure 10].

The error log indicates the Sheet, Cell and Problem that must be corrected before the EDD file can be produced. Navigate back to the appropriate sheet and cell and make all necessary corrections to all fields listed in the error log.

Return to the results sheet and click the "Check Data & Produce EDD" tab again. If all errors have been corrected, the EDD file may be produced. If not, the system will return you again to the error log for further correction of errors.

	A	В	C
1	NJDEP PWTA EDD Error Log - Generated 6/20/2002 4:56:21 PM	1	
2	Sheet	Cell	Problem
3	Demographic Information	B9	You MUST enter a First Name
4	Demographic Information	B10	You MUST enter a Last Name
5	Demographic Information	B11	You MUST enter an Address
6	Demographic Information	B13	You MUST enter a City
7	Demographic Information	B14	You MUST enter a State
8	Demographic Information	B15	You MUST enter a Postal Code
9	Demographic Information	B19	You MUST enter an Address
10	Demographic Information	B22	You MUST enter a Municipality Code
11	Demographic Information	B23	You MUST enter a Postal Code
12	Demographic Information	B24	You MUST enter a Lot Code
13	Demographic Information	B25	You MUST enter a Block Code
14	Demographic Information	B26	You MUST enter a X Coordinate
15	Demographic Information	B27	You MUST enter a Y Coordinate
16	Demographic Information	B28	You MUST enter a Coordinate Method
17	Demographic Information	B29	You MUST enter a Reference Point
18	Sample and Report Information	B8	You MUST enter a Treated Sample
19	Sample and Report Information	B12	You MUST enter a EDD Provider Certification Number
20	Sample and Report Information	B13	You MUST enter a Sample Descriptor Number
21	Sample and Report Information	B15	You MUST enter a Reporting Date
22	# # # # # # # # # # # # # # # # # # #	¢	* **
23		100	

 $Figure \ 10. \ Error \ Log \ Depicting \ Location \ and \ Description \ of \ Errors \ Detected$ 

#### 6.0 Definition of Fields and Terms

The definitions below apply to the data fields that appear in either Chapters 4 or 5 referenced in this manual.

Please note that there are several mandatory fields required in the submittal of data, which if not completed, will be rejected by the NJDEP electronic njdeponline portal. These fields are marked with an "Y" below. Fields marked with an asterisk (\*) indicate that they are conditionally required.

#### **Definition of fields and/or terms:**

#### Required?

#### Y HEADER

Designates the beginning and ending tag for the header section of the data file.

#### Y Electronic Data Deliverable Name (EDD name)

Description of the dataset being submitted, which <u>must</u> be named **PWTA-Full** Or **PWTA-PART.** Partial EDD submittals can only be created for mircobiological and/or radiological results only! No exceptions!

#### Y Electronic Data Deliverable Version (EDD version)

This is the version number of the data set-supplied by the NJDEP for each unique submittal: Example: use 1.0.0 if you are using a LIMS and have not yet reprogrammed your system in the new format-the PWTA database system will accept the older format for only 1 month after Version 2.0.0 is on-line. Once the LIMS is re-programmed into the new format use version **2.0.0.** If your lab is using the downloadable spreadsheet, the spreadsheet updates the version number automatically for you.

#### Y Reference Value Set Name (rvf set name)

Name of the EQuIS reference value file set name applicable for this data set, use PWTA if you are using a LIMS, otherwise the downloadable spreadsheet does it automatically for you.

#### Y Reference Value Set Version (rvf set version)

Version number of the reference value file set applicable at the time of submittal.. Example: use 2.0.0 if you are using a LIMS, otherwise the downloadable spreadsheet does it automatically for you.

#### Y Place Identification (Place ID)

County code for the property that contains the private well. (See Appendix 1)

#### Y Header

Ending tag

#### Y LOCATION

Designates the beginning and ending tag for the location section of the data file

#### Y EDD Provider Certification Number (edd\_provider-cert-num)

NJDEP certification number of the reporting laboratory submitting the data.

#### N Requestor Title (requestor\_title)

Title of the well test requestor. Example: "Mr. Mrs. Miss. Ms."

#### Y Requestor First Name (requestor fname)

First name of the well test sample requestor. Example: "John"

#### Y Requestor Last Name (requestor lname)

Last name of the well test sample requestor. Example: "Smith"

#### Y Requestor Address (requestor address1)

First line of the mailing address of the well test requestor. Example: "123 Main Street"

#### N Requestor Address (requestor address2)

Second line of the mailing address of the test requestor. Example: "Apartment B."

#### Y Requestor City (requestor city)

City of the well test requestor. Example: "Phoenix"

#### Y Requestor State (requestor state)

USPS state abbreviation or Province of the well test requestor. Example: "AZ" for Arizona.

#### Y Requestor Postal Code (requestor postal code)

Postal code of the well test requestor. If US address – use either 5 or 9 digit ZIP code. Example: 08685 or 086867777. Do not use dashes. If last 4 digits are unknown, you may use 0000.

#### N Requestor Country Code (requestor county code)

Home country of the well test requestor's address. May be blank for USA addresses or you may select USA from the drop-down menu.

#### Y Requestor Phone Number (requester\_phone)

Telephone number of the person requesting the well test. Do not use parenthesis or dashes.

#### Y Property Address (property add1)

First line of the property's full address. Format must include a house/building number <u>and</u> a street name. Example: "400 Center Street"

#### N Property Address (property add2)

Second line of the property's address. Example: "Suite 5"

#### Y Property Municipal Code (property muni code)

4 digit code identifying the county and municipality - the first two digits identify the county, the second two digits identify the municipality.

Example: "0213" (See Appendix 2)

#### Y Property Postal Code (property postal code)

The 5 or 9 digit ZIP code of the property. Example: "073215555". If last 4 digits are unknown, you may use 0000.

#### Y Property Block Code (property block code)

Block code of the property representing the **physical location the sampled well**. Leaving the field blank, or entering N/A, not applicable or multiple zero's are not acceptable and the EDD will be rejected. Correct format Example: "101.5"

#### Y Property Lot Code (property lot code)

Lot code of the property representing the **physical location of the sampled well**. Leaving the field blank, or entering N/A, not applicable or multiple zero's are not acceptable and the EDD will be rejected. Correct format Example: "25.5"

### Y X-Coordinate (X-Coordinate values range from 154550 - 672649-any value Outside of this range will be rejected)

X coordinate of the property expressed in standard state plane coordinates, in US survey feet as determined either by Global Positioning System (GPS) Satellites. All values must be in integers only! Correct format Example: "154,550".

### Y Y-Coordinate (Y-Coordinate values range from 19596 - 926269-any value outside of this range will be rejected)

Y coordinate of the property expressed in state plane coordinates, in US survey feet as determined either by Global Positioning System (GPS) Satellites. All values must be in integers only! Correct format Example: "19596".

**NOTE:** The Department has existing **GPS/GIS standards** in place that call for State Plane Coordinates, NAD83 horizon datum, zone New Jersey-2900, units in US survey feet. For more information on GPS collection and reporting standards visit the Department's GIS webpage at: **www.state.nj.us/dep/gis**.

#### Y Coordinate Method Code

Code for the method used to determine the X, Y coordinates. Currently only one option is available. The spreadsheet auto-populates this field. Example: "GPS." (See Appendix 3)

#### Y Reference Point Code (reference\_point\_code)

Code describing the feature on which the X, Y coordinates were determined. Example: "FD" for Front Door or (WH) for Well Head, etc. (See Appendix 4)

#### Y Sample Descriptor (sample\_descriptor)

The identification number that differentiates between sampling points when <u>more than 1</u> <u>well is sampled on the same property</u>. Default value is number 1 meaning Primary Well on the property. *Must be assigned the value '1' if only one sample collected on the property*.

Y\* Well Permit Number (well\_permit\_number) - Required for Full EDD Only!

State of New Jersey well permit number for the well (required only for new well construction less than of equal to a year old) Example: 32-0102

Y\* Well Driller Name (well\_driller\_name) - Required for Full EDD Only!

The first name, last name of the well driller (required only for new well construction less than or equal to a year old)

Y\* Well Installation Date (well\_install\_date)- Required for Full EDD Only!

The date of well installation (required only for new well construction less than or equal to a year old).

#### N Comment <u>NEWLY REVISED DESCRIPTION</u>

Text describing the sample, property or contract date. This field can be used to describe different samples collected on the same lot, block and municipality code, or can be used to indicate a sample is from a Rental Property, or indicate the contract of sale execution date. Example: Barn Well; or Rental Property or Contract of Sale Execution Date 8/8/03 (see gross alpha reporting requirements on page 49).

#### Y Report(ing) Date (report\_date)

Date the report was completed and sent to the well test requestor. This may be equivalent to the date the project/lab manager signed the report indicating its completion. **Required format is MM/DD/YYYY.** 

#### Y LOCATION

The ending tag of the location section of the data file.

#### Y SAMPLE

The beginning tag of the sample section of the data file.

#### Y Field Sample Code (field sample code)

Field Sample ID number assigned by the person who collected the sample in the field.

#### Y Sample Date (sample date)

Date the well sample was collected by the laboratory or the lab's authorized representative. Required format is MM/DD/YYYY.

#### Y Sample Time (sample time)

The time the sample was collected in the field by the laboratory or the lab's authorized representative. The required format is **HH:MM**, military time. Example: 1:00 p.m. should be entered as 13:00.

The

#### Y Sampler Name (sampler\_name)

Name of the person collecting the well sample in the field. The required format is: **FIRST NAME**, **LAST NAME**.

#### Y Sampler Affiliation (sampler\_affiliation)

Complete name of the company or agency collecting the well sample in the field. Sampler may be an employee of a NJ certified drinking water lab or the lab's authorized representative.

<u>NOTE</u>: In accordance with N.J.A.C. 7:18 the person who analyzes for pH in the field must also be certified for "analyze immediately parameters", which includes pH.

#### Y Collection Point Code (collection\_point\_code)

The code describing specifically where the well sample was collected. N.J.A.C. 7:9E requires that only raw (untreated) well samples be collected. For example: "WH" for Well Head. (See Appendix 6) Treated samples are not permitted.

#### **N** Treatment Codes (treatment\_codes)

These fields are **not applicable** since only untreated (raw water) samples must be collected in accordance with the PWTA rules.

#### Y Treated Sample (treated\_sample)

This field has a drop-down menu that only contains 'untreated' to describe the type of well sample collected by the laboratory or the lab's authorized representative. In accordance with N.J.A.C. 7:9E, only "untreated" samples are required to be collected.

#### N Comment

Text describing the sample. This field can be used to describe pertinent information about the sample or any treatment that may exist on the house or plumbing.

#### Y SAMPLE

The ending tag of the sample section of the data file.

#### Y RESULT

The beginning tag of the result section of the data file.

#### Y Data Provider Certification Number (data\_provider\_cert\_num)

NJDEP certification number of the lab that generated the result for a given parameter in the EDD. Note that **NJ labs** need not include "NJ" when reporting this certification number, instead may only enter the 5 digit certification number, Example: 01010 **For out-of-state Labs**, please note that you must use your <u>entire</u> NJ certification number and that this field is case-sensitive (use UPPER CASE), Example: **AZ**111 **NOTE: Be sure to confirm certification with OQA or PWTA Website prior to subcontracting anlayses.** 

#### Y Analysis Date (analysis date)

Date the sample was analyzed for that result. The required format for date is **MM/DD/YYYY**.

#### Y Analysis Time (analysis\_time)

Time the sample was analyzed for that result. Format is military time, **HH:MM**.

#### Y Laboratory Sample Identification Number (lab\_sample\_id)

Unique identifier for the well sample in the lab, as determined by the lab. Example: ID-2345

#### Y Laboratory Method Code (lab\_method\_code)

This field identifies the Safe Drinking Water analytical method used to produce the results. The field must contain the method number/name preceded by the organization in which the test originated. If methods have been revised after the date of publication of this manual, choose the most current version/update of the method. (**See Appendix 7**) Be certain not to add any extra blank spaces if entering analytical methods manually.

#### Y Chemical Abstract Service Number (cas num)

CAS number for the required parameters/contaminants analyzed in the well water sample. (**See Appendix 8**) ) Note: If you are using the downloadable Excel Spreadsheet, clicking on the 'Drop Components into Sheet" button will automatically populate the parameters (by county), CAS numbers, and unit fields.

#### Y Analyte Name (analyte\_name)

Analyte name for the required parameter/contaminant analyzed in the well water sample. (See Appendix 8 & 9) ) Note: If you are using the downloadable Excel Spreadsheet, clicking on the 'Drop Components into Sheet" button will automatically populate the parameters (by county), CAS numbers, and unit fields.

#### Y Result Value (result\_value)

Numeric result for each required parameter analyzed in the well water sample. Do not Leave field blank. A value must be entered, unlike Version 1.0.0. **Please use 0 for results that are non-detect**. Do not use <u>any punctuation marks including a less than sign (<) or comma in this field.</u>

#### **NOTE:** Some special reporting requirements exist for certain analytes below:

#### a.) Microbiological results:

Since *total coliform and fecal coliform & E. coli* are not reported in the same manner as most parameters, numerical substitutes have been assigned by NJDEP and <u>must</u> be used in your data submittal. For example, enter "1" if the result was positive (present); enter a zero if the result was negative (absent). Once a "1" is entered a new pop-up screen will appear and for a second microbiological result (either fecal or e. coli); click on the appropriate response. N.J.A.C. 7:9E requires a subsequent microbiological test (fecal or E. coli) be performed if total coliform is positive, therefore a second micro result must be represented in your EDD submittal.

#### b. Radiological results:

If the result of the (initial) 48-Hour Rapid Gross Alpha Test is greater than 5pCi/l, a subsequent (final) gross alpha count must be performed within 48 hours of the first

count, and therefore, a subsequent (final) gross alpha result must be reported. Any deviation from this and the EDD will be rejected.

#### **NEW as of 9/22/03** - Reporting Gross Alpha Results:

The database now expects gross alpha results for Atlantic, Burlington, Cumberland, Camden, Gloucester, and Salem Counties. However, not all *contracts of sale* were executed on or after the gross alpha effective dates of March 15<sup>th</sup>, 2003 or September 16<sup>th</sup>, 2003. Therefore, when the contract of sale was executed **BEFORE** the effective date to test for gross alpha in the above counties, please indicate so in the "comment" field near the Report Date field (third tab of the Excel Spreadsheet called Sample and report Information). Please enter the following: Contract of Sale Execution Date is please provide. In addition, please fill in **0** for the Result Field and **0** in the MRL Field in the spreadsheet or LIMS when the Contract of Sale Execution Date is prior to the effective date for gross alpha testing.

<u>NOTE:</u> If this process is not followed exactly, the EDD will be returned for revision.

#### Y Result Unit (result unit)

Concentration value of required analyte, parameter, or contaminant that the analytical results are expressed in. The required units of concentration are **micrograms/liter (ug/l)**, except iron, manganese, pH, and total coliform, fecal coliform, and/or E. coli. Iron and manganese concentrations are to be expressed in **milligrams/liter (mg/l)**. Microbiologicals (total coliform, fecal coliform, E. coli) are to be expressed as **presence or absence (pres/abs)**. Gross alpha (initial and total) are to be express in **picocuries/liter (pCi/l)**. The units for pH are expressed as **"su"** for **standard units**. **Note:** If you are using the downloadable Excel Spreadsheet, clicking on the "**Drop Components into Sheet**" button will automatically populate the parameters (by county), CAS numbers, and unit fields.

Y Detect Flag (detect\_flag) This value is case sensitive, use UPPER CASE A value of 'Y' if required parameter/contaminant is detected at or above the MRL/MDC, or 'N' if required parameter/contaminant was not detected above the MRL/MDC.

**NOTE:** Special instructions are provided for coliform; only enter "**Y**" for a positive result, and an "**N**" for negative results or test not run for coliform. Also, since pH is a required parameter, pH <u>must</u> ALWAYS have a "**Y**" in the "Detect Flag" field if pH was measured as required in the Act and the PWTA regulations.

#### Y MRL/MDC

The result specific Minimum Reporting Limit (MRL) for a given parameter/contaminant as dictated by the sensitivity of the analytical equipment that actually produced the result. Method Detection Concentration (MDC) refers to the minimum concentration detected during *radiological analysis only*. A MDC value of 0 is only permitted when the contract of sale execution date is prior to the requirement to test for gross alpha.

#### Y Attribute Name

Required contaminants analyzed in accordance with the Private Well Testing Act & PWTA regulations. (**See Appendix 8 & 9**) NOTE: If you are using the downloadable Excel Spreadsheet, clicking on the '**Drop Components into Sheet**" button will automatically populate the parameters (by county), CAS numbers, and unit fields.

#### **Miscellaneous terms:**

**Full EDD Submittal**- Electronic Data Deliverable - a complete PWTA analytical data package submitted to the NJDEP-PWTA Program which satisfies the requirements of N.J.A.C. 7:9E.

**Partial EDD Submittal-** Electronic Data Deliverable - a partial analytical data package submitted to the NJDEP-PWTA Program which satisfies the requirements of N.J.A.C. 7:9E-2.1 & N.J.A.C. 7:18 for <u>microbiological</u> analyses; and/or NJAC 7:18-6.1 and NJAC 7:9E-2.1 for <u>radiological</u> analyses only!

**Correction** – refers to a resubmitted EDD whose content differs from the database content. If the sample already exists in the database, the EDD content will be compared to all data for the sample in the database. If any EDD content differs from the database content, the EDD will be considered a correction and the different data will replace the existing database data.

**Duplicate** – refers to a resubmitted EDD whose content **exactly** matches the database content. If this is the case, the EDD will be considered a duplicate and rejected by the system. A rejection notification will automatically be sent out to the sender.

**Required Parameters** - Those analytes listed in the Private Well Testing Act namely: bacteria (total coliform), nitrates, iron, manganese, pH, lead, and all volatile organic compounds for which maximum contaminant levels (MCLs) have been established according to state law. The Private Well Testing Act Regulations (N.J.A.C. 7:9E) require the same parameters as the Act, plus \*mercury, \*\*\*arsenic, and \*\*pross alpha particle activity.

- <sup>+</sup> Requirement is currently being phased-in for Cumberland and Gloucester Counties the effective date is March 15<sup>th</sup>, 2003. (see Appendix 9)
- ◆ Requirement is currently being phased-in for Atlantic, Burlington, Camden and Salem Counties the effective date September 16<sup>th</sup>, 2003. (see Appendix 9)

<sup>\*</sup> Requirement is county-specific (see Appendix 9)

<sup>&</sup>lt;sup>#</sup> The current USEPA effective MCL for Arsenic is **50 ug/l (ppb)**. A new MCL of 10 ug/l (ppb) has been adopted by the USEPA and will take effect nationally in January 2006.

# $\frac{\textbf{APPENDIX 1: ACCEPTABLE COUNTY REFERENCE CODES FOR THE}}{\textbf{PWTA EDD SUBMITTAL}}$

COUNTY_CODE	COUNTY_NAME
01	Atlantic
02	Bergen
03	Burlington
04	Camden
05	Cape May
06	Cumberland
07	Essex
08	Gloucester
09	Hudson
10	Hunterdon
11	Mercer
12	Middlesex
13	Monmouth
14	Morris
15	Ocean
16	Passaic
17	Salem
18	Somerset
19	Sussex
20	Union
21	Warren

# APPENDIX 2: MUNICIPAL REFERENCE CODES FOR PWTA EDD SUBMITTAL

MUNI_CODE	COUNTY_NAME	MUNICIPALITY_NAME
0101	Atlantic	Absecon City
0102	Atlantic	Atlantic City
0103	Atlantic	Brigantine City
0104	Atlantic	Buena Boro
0105	Atlantic	Buena Vista Twp
0106	Atlantic	Corbin City
0107	Atlantic	Egg Harbor City
0108	Atlantic	Egg Harbor Twp
0109	Atlantic	Estell Manor City
0110	Atlantic	Folsom Boro
0111	Atlantic	Galloway Twp
0112	Atlantic	Hamilton Twp
0113	Atlantic	Hammonton Town
0114	Atlantic	Linwood City
0115	Atlantic	Longport Boro
0116	Atlantic	Margate City
0117	Atlantic	Mullica Twp
0118	Atlantic	Northfield City
0119	Atlantic	Pleasantville City
0120	Atlantic	Port Republic City
0121	Atlantic	Somers Point City
0122	Atlantic	Ventnor City
0123	Atlantic	Weymouth Twp
0201	Bergen	Allendale Boro
0202	Bergen	Alpine Boro
0203	Bergen	Bergenfield Boro
0204	Bergen	Bogota Boro
0205	Bergen	Carlstadt Boro
0206	Bergen	Cliffside Park Boro
0207	Bergen	Closter Boro
0208	Bergen	Cresskill Boro
0209	Bergen	Demarest Boro
0210	Bergen	Dumont Boro
0211	Bergen	Elmwood Park Boro
0212	Bergen	East Rutherford Boro
0213	Bergen	Edgewater Boro
0214	Bergen	Emerson Boro
0215	Bergen	Englewood City
0216	Bergen	Englewood Cliffs Boro
0217	Bergen	Fair Lawn Boro
0218	Bergen	Fairview Boro
0219	Bergen	Fort Lee Boro
0220	Bergen	Franklin Lakes Boro

0224	Porgon	Corfiold City
0221	Bergen	Garfield City
0222	Bergen	Glen Rock Boro
0223	Bergen	Hackensack City
0224	Bergen	Harrington Park Boro
0225	Bergen	Hasbrouck Heights
0226	Bergen	Haworth Boro
0227	Bergen	Hillsdale Boro
0228	Bergen	Hohokus Boro
0229	Bergen	Leonia Boro
0230	Bergen	Little Ferry Boro
0231	Bergen	Lodi Boro
0232	Bergen	Lyndhurst Twp
0233	Bergen	Mahwah Twp
0234	•	•
	Bergen	Maywood Boro
0235	Bergen	Midland Park Boro
0236	Bergen	Montvale Boro
0237	Bergen	Moonachie Boro
0238	Bergen	New Milford Boro
0239	Bergen	North Arlington Boro
0240	Bergen	Northvale Boro
0241	Bergen	Norwood Boro
0242	Bergen	Oakland Boro
0243	Bergen	Old Tappan Boro
0244	Bergen	Oradell Boro
0245	Bergen	Palisades Park Boro
0246	Bergen	Paramus Boro
0247	Bergen	Park Ridge Boro
0248	Bergen	Ramsey Boro
0249	_	Ridgefield Boro
0250	Bergen	
	Bergen	Ridgefield Park Village
0251	Bergen	Ridgewood Village
0252	Bergen	River Edge Boro
0253	Bergen	River Vale Twp
0254	Bergen	Rochelle Park Twp
0255	Bergen	Rockleigh Boro
0256	Bergen	Rutherford Boro
0257	Bergen	Saddle Brook Twp
0258	Bergen	Saddle River Boro
0259	Bergen	South Hackensack Twp
0260	Bergen	Teaneck Twp
0261	Bergen	Tenafly Boro
0262	Bergen	Teterboro Boro
0263	Bergen	Upper Saddle River
0264	Bergen	Waldwick Boro
0265	Bergen	Wallington Boro
0266	Bergen	Washington Twp
0267	_	Westwood Boro
	Bergen	
0268	Bergen	Woodcliff Lake Boro

	_	
0269	Bergen	Wood-Ridge Boro
0270	Bergen	Wyckoff Twp
0301	Burlington	Bass River Twp
0302	Burlington	Beverly City
0303	Burlington	Bordentown City
0304	Burlington	Bordentown Twp
	•	•
0305	Burlington	Burlington City
0306	Burlington	Burlington Twp
0307	Burlington	Chesterfield Twp
0308	Burlington	Cinnaminson Twp
0309	Burlington	Delanco Twp
0310	Burlington	Delran Twp
0311	Burlington	Eastampton Twp
0312	Burlington	Edgewater Park Twp
0313	Burlington	Evesham Twp
0314	Burlington	Fieldsboro Boro
	•	
0315	Burlington	Florence Twp
0316	Burlington	Hainesport Twp
0317	Burlington	Lumberton Twp
0318	Burlington	Mansfield Twp
0319	Burlington	Maple Shade Twp
0320	Burlington	Medford Twp
0321	Burlington	Medford Lakes Boro
0322	Burlington	Moorestown
0323	Burlington	Mount Holly Twp
0324	Burlington	Mount Laurel Twp
0325	Burlington	New Hanover Twp
0326	Burlington	North Hanover Twp
0327	•	•
	Burlington	Palmyra Boro
0328	Burlington	Pemberton Boro
0329	Burlington	Pemberton Twp
0330	Burlington	Riverside Twp
0331	Burlington	Riverton Boro
0332	Burlington	Shamong Twp
0333	Burlington	Southampton Twp
0334	Burlington	Springfield Twp
0335	Burlington	Tabernacle Twp
0336	Burlington	Washington Twp
0337	Burlington	Westampton Twp
0338	Burlington	Willingboro Twp
0339	Burlington	Woodland Twp
0340	Burlington	Wrightstown Boro
	•	•
0401	Camden	Audubon Boro
0402	Camden	Audubon Park Boro
0403	Camden	Barrington Boro
0404	Camden	Bellmawr Boro
0405	Camden	Berlin Boro
0406	Camden	Berlin Twp

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0407	Camden	Brooklawn Boro
0408	Camden	Camden City
0409	Camden	Cherry Hill Twp
		•
0410	Camden	Chesilhurst Boro
0411	Camden	Clementon Boro
0412	Camden	Collingswood Boro
0413	Camden	Gibbsboro Boro
0414	Camden	Gloucester City
		•
0415	Camden	Gloucester Twp
0416	Camden	Haddon Twp
0417	Camden	Haddonfield Boro
0418	Camden	Haddon Heights Boro
0419	Camden	Hi-Nella Boro
0420	Camden	Laurel Springs Boro
0421	Camden	Lawnside Boro
0422	Camden	Lindenwold Boro
0423	Camden	Magnolia Boro
0424	Camden	Merchantville Boro
0425	Camden	Mount Ephraim Boro
0426	Camden	Oaklyn Boro
0427	Camden	Pennsauken Twp
0428	Camden	Pine Hill Boro
0429	Camden	Pine Valley Boro
0430	Camden	Runnemede Boro
0431	Camden	Somerdale Boro
0432	Camden	Stratford Boro
0433	Camden	Tavistock Boro
0434	Camden	Voorhees Twp
0435	Camden	Waterford Twp
0436	Camden	Winslow Twp
		•
0437	Camden	Woodlynne Boro
0501	Cape May	Avalon Boro
0502	Cape May	Cape May City
0503	Cape May	Cape May Point Boro
0504	Cape May	Dennis Twp
0505	Cape May	Lower Twp
0506	Cape May	Middle Twp
0507	Cape May	North Wildwood City
	•	•
0508	Cape May	Ocean City
0509	Cape May	Sea Isle City
0510	Cape May	Stone Harbor Boro
0511	Cape May	Upper Twp
0512	Cape May	West Cape May Boro
0513	Cape May	West Wildwood Boro
0514	•	Wildwood City
	Cape May	
0515	Cape May	Wildwood Crest Boro
0516	Cape May	Woodbine Boro
0601	Cumberland	Bridgeton City

0602	Cumberland	Commercial Twp
0603	Cumberland	Deerfield Twp
0604	Cumberland	Downe Twp
0605	Cumberland	Fairfield Twp
0606	Cumberland	Greenwich Twp
0607	Cumberland	Hopewell Twp
0608	Cumberland	Lawrence Twp
0609	Cumberland	Maurice River Twp
0610	Cumberland	Millville City
0611	Cumberland	Shiloh Boro
0612	Cumberland	Stow Creek Twp
0613	Cumberland	Upper Deerfield Twp
0614	Cumberland	Vineland City
0701	Essex	Belleville Town
0702	Essex	Bloomfield Town
0703	Essex	Caldwell Boro
0704	Essex	Cedar Grove Twp
0705	Essex	East Orange City
0706	Essex	Essex Fells Boro
0707	Essex	Fairfield Twp
0708	Essex	Glen Ridge Boro Twp
0709	Essex	Irvington Town
0710	Essex	Livingston Twp
0711	Essex	Maplewood Twp
0712	Essex	Millburn Twp
0713	Essex	Montclair Town
0714	Essex	Newark
0715	Essex	North Caldwell Boro
0716	Essex	Nutley Town
0717	Essex	Orange City
0718	Essex	Roseland Boro
0719	Essex	South Orange Village
0720	Essex	Verona Boro
0721	Essex	West Caldwell Boro Twp
0722	Essex	West Orange Town
0801	Gloucester	Clayton Boro
0802	Gloucester	Deptford Twp
0803	Gloucester	East Greenwich Twp
0804	Gloucester	Elk Twp
0805	Gloucester	Franklin Twp
0806	Gloucester	Glassboro Boro
0807	Gloucester	Greenwich Twp
0808	Gloucester	Harrison Twp
0809	Gloucester	Logan Twp
0810	Gloucester	Mantua Twp
0811	Gloucester	Monroe Twp
0812	Gloucester	National Park Boro
0813	Gloucester	Newfield Boro
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0814	Gloucester	Paulsboro Boro
0815	Gloucester	Pitman Boro
0816	Gloucester	South Harrison Twp
0817	Gloucester	Swedesboro Boro
0818	Gloucester	Washington Twp
0819	Gloucester	Wenonah Boro
0820	Gloucester	West Deptford Twp
0821	Gloucester	Westville Boro
0822	Gloucester	Woodbury City
0823	Gloucester	Woodbury Heights Boro
0824	Gloucester	
		Woolwich Twp
0901	Hudson	Bayonne City
0902	Hudson	East Newark Boro
0903	Hudson	Guttenberg Town
0904	Hudson	Harrison Town
0905	Hudson	Hoboken City
0906	Hudson	Jersey City
0907	Hudson	Kearny Town
0908	Hudson	North Bergen Twp
0909	Hudson	Secaucus Town
0910	Hudson	Union City
0911	Hudson	Weehawken Twp
0912	Hudson	West New York Town
1001	Hunterdon	Alexandria Twp
1002	Hunterdon	Bethlehem Twp
1003	Hunterdon	Bloomsbury Boro
1004	Hunterdon	Califon Boro
1005	Hunterdon	Clinton Town
1006	Hunterdon	Clinton Twp
1007	Hunterdon	Delaware Twp
1008	Hunterdon	East Amwell Twp
1009	Hunterdon	Flemington Boro
1010	Hunterdon	Franklin Twp
1011	Hunterdon	Frenchtown Boro
1012	Hunterdon	Glen Gardner Boro
1013	Hunterdon	Hampton Boro
1014	Hunterdon	High Bridge Boro
1015	Hunterdon	Holland Twp
1016	Hunterdon	Kingwood Twp
1017	Hunterdon	Lambertville City
1018	Hunterdon	Lebanon Boro
1019	Hunterdon Hunterdon	Lebanon Twp Milford Boro
1020		
1021	Hunterdon	Raritan Twp
1022	Hunterdon	Readington Twp
1023	Hunterdon	Stockton Boro
1024	Hunterdon	Tewksbury Twp
1025	Hunterdon	Union Twp

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1026	Hunterdon	West Amwell Twp
1101	Mercer	•
1102		East Windsor Twp
	Mercer	Ewing Twp
1103	Mercer	Hamilton Twp
1104	Mercer	Hightstown Boro
1105	Mercer	Hopewell Boro
1106	Mercer	Hopewell Twp
1107	Mercer	Lawrence Twp
1108	Mercer	Pennington Boro
1109	Mercer	Princeton Boro
1110	Mercer	Princeton Twp
1111	Mercer	Trenton City
1112	Mercer	Washington Twp
1113	Mercer	West Windsor Twp
1201	Middlesex	Carteret Boro
1202	Middlesex	Cranbury Twp
1203	Middlesex	Dunellen Boro
1204	Middlesex	East Brunswick Twp
1205	Middlesex	Edison Twp
1206	Middlesex	Helmetta Boro
1207	Middlesex	Highland Park Boro
1208	Middlesex	Jamesburg Boro
1209	Middlesex	Old Bridge Twp
1210	Middlesex	Metuchen Boro
1211	Middlesex	Middlesex Boro
1212	Middlesex	Milltown Boro
1213	Middlesex	Monroe Twp
1214	Middlesex	New Brunswick City
1215	Middlesex	North Brunswick Twp
1216	Middlesex	Perth Amboy City
1217	Middlesex	Piscataway Twp
1218	Middlesex	Plainsboro
1219	Middlesex	Sayreville Boro
1220	Middlesex	South Amboy City
1221	Middlesex	South Brunswick Twp
1222	Middlesex	South Plainfield Boro
1223	Middlesex	South River Boro
1224	Middlesex	Spotswood Boro
1225	Middlesex	Woodbridge Twp
1301	Monmouth	Allenhurst Boro
1302	Monmouth	Allentown Boro
1303	Monmouth	Asbury Park City
1304	Monmouth	Atl Highlands Boro
1305	Monmouth	Avon-By-The-Sea-Boro
1306	Monmouth	Belmar Boro
1307	Monmouth	Bradley Beach Boro
1308	Monmouth	Brielle Boro
1309	Monmouth	Colts Neck Twp

1010	Managaruth	Dool Doro
1310	Monmouth	Deal Boro
1311	Monmouth	Eatontown Boro
1312	Monmouth	Englishtown Boro
1313	Monmouth	Fair Haven Boro
1314	Monmouth	Farmingdale Boro
1315	Monmouth	Freehold Boro
1316	Monmouth	Freehold Twp
1317	Monmouth	Highlands Boro
1318	Monmouth	Holmdel Twp
1319	Monmouth	Howell Twp
1320	Monmouth	Interlaken Boro
1321	Monmouth	Keansburg Boro
1322	Monmouth	Keyport Boro
1323	Monmouth	Little Silver Boro
1324	Monmouth	
		Loch Arbour Village
1325	Monmouth	Long Branch City
1326	Monmouth	Manalapan Twp
1327	Monmouth	Manasquan Boro
1328	Monmouth	Marlboro Twp
1329	Monmouth	Matawan Boro
1330	Monmouth	Aberdeen Twp
1331	Monmouth	Middletown Twp
1332	Monmouth	Millstone Twp
1333	Monmouth	Monmouth Beach Boro
1334	Monmouth	Neptune Twp
1335	Monmouth	Neptune City Boro
1336	Monmouth	Tinton Falls Boro
1337	Monmouth	Ocean Twp
1338	Monmouth	Oceanport Boro
1339	Monmouth	Hazlet Twp
1340	Monmouth	Red Bank Boro
1341	Monmouth	Roosevelt Boro
	Monmouth	Rumson Boro
1342		
1343	Monmouth	Sea Bright Boro
1344	Monmouth	Sea Girt Boro
1345	Monmouth	Shrewsbury Boro
1346	Monmouth	Shrewsbury Twp
1347	Monmouth	South Belmar Boro
1348	Monmouth	Spring Lake Boro
1349	Monmouth	Spring L Heights Boro
1350	Monmouth	Union Beach Boro
1351	Monmouth	Upper Freehold Twp
1352	Monmouth	Wall Twp
1353	Monmouth	West Long Branch Boro
1401	Morris	Boonton Town
1402	Morris	Boonton Twp
1403	Morris	Butler Boro
1404	Morris	Chatham Boro
I IV I	14101110	

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1405	Morris	Chatham Twp
1406	Morris	Chester Boro
1407	Morris	Chester Twp
1408	Morris	Denville Twp
1409	Morris	Dover Town
1410	Morris	East Hanover Twp
1411	Morris	Florham Park Boro
1412	Morris	Hanover Twp
1413	Morris	Harding Twp
1414	Morris	Jefferson Twp
1415	Morris	Kinnelon Boro
1416	Morris	Lincoln Park Boro
1417	Morris	Madison Boro
1418	Morris	Mendham Boro
1419	Morris	Mendham Twp
1420	Morris	Mine Hill Twp
1421	Morris	Montville Twp
1422	Morris	Morris Twp
1423	Morris	Morris Plains Boro
1424	Morris	Morristown Town
1425	Morris	Mountain Lakes Boro
1426	Morris	Mount Arlington Boro
1427	Morris	
		Mount Olive Twp
1428	Morris	Netcong Boro
1429	Morris	Parsippany Troy-Hills
1430	Morris	Long Hill Twp
1431	Morris	Pequannock Twp
1432	Morris	Randolph Twp
1433	Morris	Riverdale Boro
1434	Morris	Rockaway Boro
1435	Morris	Rockaway Twp
1436	Morris	Roxbury Twp
1437	Morris	Victory Gardens Boro
1438	Morris	Washington Twp
1439	Morris	Wharton Boro
1501	Ocean	Barnegat Light Boro
1502	Ocean	Bay Head Boro
1503	Ocean	Beach Haven Boro
1504	Ocean	Beachwood Boro
1505	Ocean	Berkeley Twp
1506	Ocean	Brick Twp
1507	Ocean	Dover Twp
1508	Ocean	Eagleswood Twp
1509	Ocean	Harvey Cedars Boro
1510	Ocean	Island Heights Boro
1511	Ocean	Jackson Twp
1512	Ocean	Lacey Twp
1513	Ocean	Lakehurst Boro

1514	Ocean	Lakewood Twp
1515	Ocean	Lavallette Boro
1516	Ocean	Little Egg Harbor
1517	Ocean	Long Beach Twp
1518	Ocean	Manchester Twp
1519	Ocean	Mantoloking Boro
		_
1520	Ocean	Ocean Twp
1521	Ocean	Ocean Gate Boro
1522	Ocean	Pine Beach Boro
1523	Ocean	Plumsted Twp
1524	Ocean	Point Pleasant Boro
1525	Ocean	Point P Beach Boro
1526	Ocean	Seaside Heights Boro
1527	Ocean	Seaside Park Boro
1528	Ocean	Ship Bottom Boro
1529	Ocean	South Toms River Boro
1530	Ocean	Stafford Twp
1531	Ocean	Surf City Boro
1532		Tuckerton Boro
	Ocean	
1533	Ocean	Barnegat Twp
1601	Passaic	Bloomingdale Boro
1602	Passaic	Clifton City
1603	Passaic	Haledon Boro
1604	Passaic	Hawthorne Boro
1605	Passaic	Little Falls Twp
1606	Passaic	North Haledon Boro
1607	Passaic	Passaic City
1608	Passaic	Paterson City
1609	Passaic	Pompton Lakes Boro
1610	Passaic	Prospect Park Boro
1611	Passaic	Ringwood Boro
1612	Passaic	Totowa Boro
1613	Passaic	Wanaque Boro
1614	Passaic	Wayne Twp
1615	Passaic	West Milford Twp
1616	Passaic	West Paterson Boro
1701	Salem	Alloway Twp
1702	Salem	Elmer Boro
1703	Salem	Elsinboro Twp
1704	Salem	Lower Alloways Cr
1705	Salem	Mannington Twp
1706	Salem	Oldmans Twp
1707	Salem	Penns Grove Boro
1708	Salem	Pennsville Twp
1709	Salem	Pilesgrove Twp
1710	Salem	
		Pittsgrove Twp
1711	Salem	Quinton Twp
1712	Salem	Salem City

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4=40	0.1	0 5:4-
1713	Salem	Carneys Point Twp
1714	Salem	Upper Pittsgrove Twp
1715	Salem	Woodstown Boro
1801	Somerset	Bedminster Twp
1802	Somerset	Bernards Twp
1803	Somerset	Bernardsville Boro
1804	Somerset	Bound Brook Boro
1805	Somerset	Branchburg Twp
1806	Somerset	• .
		Bridgewater Twp
1807	Somerset	Far Hills Boro
1808	Somerset	Franklin Twp
1809	Somerset	Green Brook Twp
1810	Somerset	Hillsborough Twp
1811	Somerset	Manville Boro
1812	Somerset	Millstone Boro
1813	Somerset	Montgomery Twp
1814	Somerset	North Plainfield Boro
1815	Somerset	Peapack-Gladstone
1816	Somerset	Raritan Boro
1817	Somerset	Rocky Hill Boro
1818	Somerset	Somerville Boro
1819	Somerset	So Bound Brook Boro
1820	Somerset	Warren Twp
1821	Somerset	•
		Watchung Boro
1901	Sussex	Andover Boro
1902	Sussex	Andover Twp
1903	Sussex	Branchville Boro
1904	Sussex	Byram Twp
1905	Sussex	Frankford Twp
1906	Sussex	Franklin Boro
1907	Sussex	Fredon Twp
1908	Sussex	Green Twp
1909	Sussex	Hamburg Boro
1910	Sussex	Hampton Twp
1911	Sussex	Hardyston Twp
1912	Sussex	Hopatcong Boro
1913	Sussex	Lafayette Twp
1914	Sussex	Montague Twp
		Newton Town
1915	Sussex	
1916	Sussex	Ogdensburg Boro
1917	Sussex	Sandyston Twp
1918	Sussex	Sparta Twp
1919	Sussex	Stanhope Boro
1920	Sussex	Stillwater Twp
1921	Sussex	Sussex Boro
1922	Sussex	Vernon Twp
1923	Sussex	Walpack Twp
1924	Sussex	Wantage Twp
		<b>-</b> '

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2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2101	Union	Berkeley Heights Twp Clark Twp Cranford Twp Elizabeth City Fanwood Boro Garwood Boro Hillside Twp Kenilworth Boro Linden City Mountainside Boro New Providence Boro Plainfield City Rahway City Roselle Boro Roselle Park Boro Scotch Plains Twp Springfield Twp Summit City Union Twp Westfield Town Winfield Twp Allamuchy Twp
2102 2103	Warren Warren	Alpha Boro Belvidere Town
2104 2105	Warren Warren	Blairstown Twp Franklin Twp
2106	Warren	Frelinghuysen Twp
2107	Warren	Greenwich Twp
2108 2109	Warren Warren	Hackettstown Town Hardwick Twp
2110	Warren	Harmony Twp
2111	Warren	Hope Twp
2112	Warren	Independence Twp
2113	Warren	Knowlton Twp
2114	Warren	Liberty Twp <sup>'</sup>
2115	Warren	Lopatcong Twp
2116	Warren	Mansfield Twp
2117	Warren	Oxford Twp
2119	Warren	Phillipsburg Town
2120	Warren	Pohatcong Twp
2121	Warren	Washington Boro
2122	Warren	Washington Twp
2123	Warren	White Twp
9999		Out Of State

### APPENDIX 3: ACCEPTABLE X,Y COORDINATE METHOD CODES FOR THE PWTA EDD SUBMITTAL

COORDINATE_METHOD_CODE	DESCRIPTION
GPS	gps unit recording

### APPENDIX 4: ACCEPTABLE REFERENCE CODES FOR THE ORIGIN OF X,Y COORDINATES COLLECTED AT PROPERTY

REFERENCE_POINT_CODE	DESCRIPTION
WHR	at raised wellhead
WHF	at well head-pit/flush mount
FD	front door
SCP	sample collection point

## APPENDIX 5: ACCEPTABLE REFERENCE CODES FOR PWTA WELL SAMPLE LOCATIONS

COLLECTION_POINT_CODE	DESCRIPTION
BFRT	Before Treatment
WH	Directly at Well Head
SPIGO	Outdoor Spigot
KT	Kitchen Tap
BT	Bathroom Tap
ALTLO	Alternate Location

## APPENDIX 6: ACCEPTABLE REFERENCE CODES FOR PWTA ANALYTICAL METHODS

ANALYTE_NAME	DESCRIPTION	LAB_METHOD_CODE
Lead	EPA Method 200.9	EPA200.9
	EPA Method 200.8	EPA200.8
	SM 3113B	SM3113B
	ASTM D3559-95D	ASTMD355995D
Iron	EPA Method 200.9	EPA200.9
	EPA Method 200.7	EPA200.7
	SM 3113B	SM3113B
	SM 3111B	SM3111B
	SM 3120B	SM3120B
Manganese	EPA Method 200.7	EPA200.7
_	EPA Method 200.8	EPA200.8
	EPA Method 200.9	EPA200.9
	SM 3113B	SM3113B
	SM 3111B	SM3111B
	SM 3120B	SM3120B
Nitrates	EPA Method 300.0	EPA300.0
	EPA Method 353.2	EPA353.2
	ASTM D3867-90A	ASTMD386790A
	ASTM D3867-90B	ASTMD386790B
	ASTM D4327-91	ASTMD432791
	SM 4110B	SM4110B
	SM 4500-NO3-D	SM4500NO3D
	SM 4500-NO3-E	SM4500NO3E
	SM 4500-NO3-F	SM4500NO3F
	Method B-1011	MethodB1011
	Method 601	Method601
	Lachet 10-107-04-1-A	10107041A
рН	EPA Method 150.1	EPA150.1
	ASTM D1293-95	ASTMD129395
	SM 4500-H+B	SM4500HB
Gross Alpha (initial & final)	48 Hr. Rapid Gross	NJDEP48HRGAT
	Alpha Test	
Coliform Total	SM 9221B	SM9221B
	SM 9221D	SM9221D
	SM 9222B	SM9222B
	SM 9222D	SM9222D
	SM 9223B	SM9223B
E. coli	SM 9222B	SM9222B
	SM 9223B	SM9223B
	SM 9221E+MUG	SM9221E+MUG
Fecal Coliform	SM 9221E	SM9221E

Arsenic	EPA Method 200.7	EPA200.7
	EPA Method 200.8	EPA200.8
	EPA Method 200.9	EPA200.9
	ASTM D2972-93B	ASTMD297293B
	ASTM D2972-93C	ASTMD297293C
	SM 3113B	SM3113B
	SM 3114B	SM3114B
	SM 3120B	SM3120B
Mercury	EPA Method 200.8	EPA200.8
•	EPA Method 245.1	EPA245.1
	EPA Method 245.2	EPA245.2
	ASTM D3223-91	ASTMD322391

SM 3112B

#### Benzene

Carbon Tetrachloride meta-Dichlorobenzene ortho-Dichlorobenzene para-Dichlorobenzene 1,1-Dichorloethane 1.2-Dichloroethane 1,1-Dichloroethylene cis-1,2-Dichloroethylene trans-1,2-Dichloroethylene 1,2-Dichloropropane Ethylbenzene Methyl tertiary butyl ether Methylene Chloride Monochlorobenzene Naphthalene Styrene 1,1,2,2-Tetrachloroethane Tetrachloroethylene Toluene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene Vinyl Chloride

**EPA Method 524.2** EPA524.2

SM3112B

Xylenes (Total)

#### Benzene

Carbon Tetrachloride meta-Dichlorobenzene ortho-Dichlorobenzene

para-Dichlorobenzene

1,1-Dichorloethane

1,2-Dichloroethane

1,1-Dichloroethylene

cis-1,2-Dichloroethylene

trans-1,2-Dichloroethylene

1,2-Dichloropropane

Ethylbenzene

Methyl tertiary butyl ether

Methylene Chloride

Monochlorobenzene

Naphthalene

Styrene

1,1,2,2-Tetrachloroethane

Tetrachloroethylene

Toluene

1.2,4-Trichlorobenzene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichloroethylene

Vinyl Chloride

Xylenes (Total)

Carbon Tetrachloride

Tetrachloroethylene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichloroethylene

**EPA Method 502.2** EPA502.2

**EPA Method 551.1** EPA 551.1

# APPENDIX 7: ACCEPTABLE REFERENCE CODES FOR PWTA ANALYTES AND THEIR CHEMICAL ABSTRACT SERVICE (CAS) NUMBERS

ANALYTE_NAME	CAS_NUMBER
Total Coliform	SDWIS-3100
E. coli	SDWIS-3014
Fecal Coliform	SDWIS-3013
Nitrates	SDWIS-1038
Iron	7439-89-6
Manganese	7439-96-5
pH	SDWIS-1925
Lead	7439-92-1
Benzene	71-43-2
Carbon Tetrachloride	56-23-5
meta-Dichlorobenzene	541-73-1
ortho-Dichlorobenzene	95-50-1
para-Dichlorobenzene	106-46-7
1,1-Dichloroethane	75-34-3
1,2-Dichloroethane	107-06-2
1,1-Dichloroethylene	75-35-4
cis-1,2-Dichloroethylene	156-59-2
trans-1,2-Dichloroethylene	156-60-5
1,2-Dichloropropane	78-87-5
Ethylbenzene	100-41-4
Methyl tertiary butyl ether	1634-04-4
Methylene Chloride	75-09-2
Monochlorobenzene	108-90-7
Naphthalene	91-20-3
Styrene	100-42-5
1,1,2,2-Tetrachloroethane	79-34-5
Tetrachloroethylene	127-18-4
Toluene	108-88-3
1,2,4-Trichlorobenzene	120-82-1
1,1,1-Trichloroethane	71-55-6
1,1,2-Trichloroethane	79-00-5
Trichloroethylene	79-01-6
Vinyl Chloride	75-01-4
Xylenes (Total)	1330-20-7
Arsenic	7440-38-2
Mercury	7439-97-6
Gross Alpha (initial)	SDWIS-4002I
Gross Alpha (final)	SDWIS-4002F
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### APPENDIX 8: REQUIRED PRIVATE WELL TESTING PARAMETERS LISTED BY COUNTY

### Effective September 16<sup>th</sup>, 2002

Required Parameters	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
Total	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fecal Coliform or E. coli	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nitrates	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Manganese	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
pН	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
VOCs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lead	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Arsenic		X					X		X	X	X	X		X		X		X		X	
Mercury	X		X	X	X	X		X					X		X		X				
Gross Alpha Particle Activity	2		2	2	3	1		1		3	3	3	3		3		2				

1 = testing required starting March 15, 2003

2 = testing required starting **September 16, 2003** 

3 = testing required staring March 16, 2004